

## INDIAN INSTITUTE OF INFORMATION TECHNOLOGY SRI CITY, CHITTOOR

(An Institute of National Importance under an Act of Parliament)

# Annual Report 2022-23



# **IIIT Sri City Chittoor**

## Annual Report 2022-23

(1<sup>st</sup> April, 2022 to 31<sup>st</sup> March, 2023)

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## 1. Director's Report



Our journey began with the able mentorship of IIIT Hyderabad along with IIT Hyderabad. We continue to follow the best practices of these institutes in all our academic and research programmes through structured collaborations.

Our new campus hosts the best in class infrastructure to support high-quality learning. Each floor of the building has designated spaces including state of the art air-conditioned classrooms, labs and faculty cabins and student activity

centers. Currently we have two-blocks of hostels and a large dining facility. The construction of two more hostel blocks combined with a dining hall is in progress. Besides, we have rented apartments for PhD and PG students in the Sri City township. Our industry partner Sri City Pvt Ltd enables access to Sri City, a largest integrated industrial township with leading 200 MNCs from 30 countries. Enabled by our industry partners, IIIT Sri City has been in regular touch with these companies to carry out collaborative projects with our students visiting these companies regularly and also taking up internship opportunities.

We strongly believe in the philosophy that good faculties can guide the students' learning and shape the student's career. Hence, we have carefully planned and recruited our faculty members who are alumni of globally known institutions. All of our faculties have PhDs from IITs/IISc or top universities worldwide. Notably, all are young and dynamic faculties with extensive research and industry experience. The faculties are quite active in their research; and importantly are able to translate their knowledge and experience into academic learning for our students.

Our BTech program has dedicated themes and tracks of courses offered to both ECE and CSE students, which are optimized regularly; based on constant feedback received from the industry. Further, since 2019, we have BTech programs with specializations in AI & Machine Learning, Cyber Security and Cyber Physical Systems. Many of the courses under these specializations are taught by industry experts; including workshops. In order to promote

UG-Research, we have a merit-based BTech Honours program wherein the students can work on a particular area under a faculty or group of faculties for a period of 2 years. They earn their Honours degrees by producing research publications or Intellectual property or a software/hardware product.

## **1. Internships and Placements**

Given the national priority for industry ready graduates and also in alignment with the vision and mission of the institution, producing highly employable graduates has been of paramount importance to the institution. In 2019, the institute had set the following short-term and long-term Goals along with specific objectives:

**3-Year Goal:** Create a critical mass of diverse companies for internships/ placements for placing the institution in the minds of industry leaders and their talent acquisition teams. The objectives were: (1) Achieving 100 % placement of eligible students (2) Significant increase in average

salary (3) Diversity of companies (Product, Start-ups, Services, etc.) for recruitment (4) Making all round efforts to get the students ready for valuable jobs.

**5-Year Goal:** Engage with industry intensively as a partner for co-producing industry-ready graduates who will create unique and high value contributions to the organizations at the international levels. The objectives were: (1) Involve industry in the Board, Senate, etc. at the strategic level for guidance (2) Involve industry at the tactical level through curriculum design and delivery, faculty development, workshops/seminars, employability readiness assessment, etc. It was planned to have sustained engagement and communication with internal and external stakeholders in order to achieve effectiveness of the programme.

#### **Key Elements are:**

- Structured approach for Industry Engagements
- Strong focus on practical and skill orientation
- Seamless integration of curricular and co-curricular activities
- Involve Faculty members in the transformation
- Focus on rural and socially backward students

The team consisting of faculty and students are divided into two teams- Strategic and Operational. Strategic team included Director, Associate Dean (IE) and Faculty advisors. The Operational team consisted of Faculty advisors, TPOs and Student committee. This approach was adopted to ensure involvement of all stakeholders.

*Impact* is a mentoring programme to help students prepare for jobs and higher studies. A group of students are being assigned to a faculty for a focused help on campus placements and internships. Based on interaction with students, faculty members share the inputs periodically to the tactical team for fine-tuning the strategies for placements for a given batch of students.

*Employment readiness assessment* is the formal mechanism through which the students' employability levels of students are measured. Initially, industry experts were involved to assess the employability readiness through assessment technical and other aspects. Due to the large number of students, a professional organization was engaged to assess the Aptitude & Reasoning and technical skills. In addition to sharing the feedback with the students, Impact mentors were also provided with the feedback to ensure right support to the students. Employability readiness assessment is one of the KRAs for faculty members and the same is used as part of the faculty performance appraisal and incentive system.

*Semester-Long Industry Project* was yet another initiative to improve the employability and expand the network of opportunities. Students take up Semester long Projects (Internships) in the VII/VIII semesters and earn 8 credits. Being a credit earning component, the progress of SLP has been closely monitored. The assessment of students is carried out by a committee of Industry mentors and faculty members. The review meetings not only created an opportunity to take inputs for industry readiness and helped the institute to expand its industry connections at the tactical/technical level.

*Career Guidance Workshops:* Few workshops are being conducted every year. Industry experts provide an overview of technology trends and career opportunities. These workshops made significant value in networking with a variety of industry experts.

*The campus placement record*: The proof the pudding is in the eating. The four years of stay of students on the campus involving curricular, co-curricular and extra-curricular engagements should result in achieving good placements or securing admission in top universities. Talking about our placement, we have been performing extremely well. Over the last four years we have improved our average salary from 8 LPA 20 LPA with placements from a diverse set of companies including a large number of successful start-ups. Our target for 2023-24 is 25 LPA, which is difficult but not impossible. I wish the UG4 students to put in their best efforts to achieve this milestone. Every year few students secure internships in top companies and convert them into placements, with a very high salary package. I congratulate Sathwik Veeramneni of the 2023 batch who has secured a job with 120 LPA. These students are our heroes and our future ambassadors.

### 2. Industry-Connected Institution

IIIT Sri City is a specialized institution to focus broadly on the IT & Electronics industry. From growth and sustainability standpoints, Industry Connectedness is a critical requirement. At this stage the following levels of Industry connect is achieved through a planned approach.

*Governing Board*- Apart from Industry partners of the Institute, three leading industry leaders are part of the Board. They provide governance leadership to the institution. A Strategic Planning Group is set up by the Board for evolving 15-Year Vision and 5-Year Strategic Plan for the institute with distinguished leaders from Government, Industry, Entrepreneurship ecosystem, social organizations, etc.

*Academic Senate-* IIITS is probably the only Government of India institution to have this level of industry participation. The Senate is represented by IBM, Intel, TCS, PayPal, etc.

**Programme Advisory Groups**- These groups are formed to help the institution by providing inputs for curriculum development, particularly in contemporary areas. Industry participation is achieved through senior experts from organizations such as Google, TCS, IBM, EY, KPMG, DSCI, etc.

*Industry Internships for Faculty-* Continuous industry alignment is the foremost requirement for growth and sustainability. The institute has launched the scheme for faculty development including industry internships. Faculty members take up internships in the summer vocation for a period of 2-3 months as on-duty along with financial support. Couple of faculty members have already completed such internships despite challenges caused by the pandemic.

*Industry Expert in Faculty recruitment panel*- IIITS is the only institution to have co-opted industry experts as part of the faculty recruitment committees to ensure minimum level of industry quotient among the newly recruited faculty members.

*International Collaboration involving industry* for improving employability in collaboration with Middlesex University under UK India British Council Project. The collaboration is further strengthened with engagements with industries. Currently organizations such as IBM, Siemens, Mathworks, NVidia, etc. are being involved to continuously improve the curriculum design and delivery.

*Industry Participation in PhD Programme*- experts with PhD and long years of experience are invited to be part of the faculty selection committees. Industry experts serve as part of the PhD student selection committees and also serve as members of the Doctoral Committees.

*Collaboration with NASSCOM DSCI:* The institute has signed a MoA with NOSSCOM DSCI for skill development through workshops, Hackathons, and other such activities.

## 3. Curriculum Development

The focus of the institution was on the important stakeholder, namely the industry. As a growing institution, offering industry-ready graduates was the top priority for the institution. It would also help the institution to attract high caliber students into the programmes, leading to a world class institution.

Aim, Size and Scope: The institute adopted a philosophy of Practice-Theory-Practice for curriculum design and delivery from the inception. However, there was a need to transform the curriculum with focus on Skill Development by actively involving the industry.

*Hard Skills and Soft Skills:* Students are admitted through JEE (Main) ranks and their preparation for structured UG programme has always been a challenge. A systematic approach was built to ensure development of hard and soft skills. For Hard Skills (Technical skills), a few initiatives were launched by incorporating seamlessly linking curricular and co-curricular initiatives.

Full Stack Development (FSD) Track- The curriculum was designed by dynamically considering the job opportunities. Extensive discussions were conducted to conceptualize and design the curriculum. For example, a horizontal FSD track with three sequential courses was launched to leverage the skill-gap in the industry. These project-based courses are being taught by a team of industry experts and internal faculty. Keeping the sustainability in mind, the faculty members are being trained through popular training companies. This initiative has significantly improved the employability of students.

*Industry-Focused BTech specializations:* Huge job opportunities were witnessed in emerging areas. It was realized that a vanilla BTech programme with one or two courses in these areas was not adequate to develop the required skills. <u>Vertical specializations</u> in AI & ML, Cyber Security,

Data Science, Cyber Physical Systems and NextGen Wireless communication with a track of three courses and an industry-based project. These vertical specializations are to be developed into BTech programmes over a period of time.

*Semester-Long Industry Projects (SLIP):* The highlight of developing hard skills has been achieved through SLIP, which not only created an opportunity for skills enhancement but also helped the industry realize the potential of the students. The assessment of the 8-credit project included industry mentors that led to avenues for understanding developments and requirements of industry.

*Focus UG Research:* There have been an increasing number of BTech jobs which demand research skills. Not many institutions including IITs/NITs addressed this space. IIITS is the first institution to introduce a research-based 16-credit BTech Honours programme, which requires the student to produce a high-quality research paper or Patent or a demonstrable working prototype. Most of the students spent a Semester in the industry. These Honours students were preferred by leading organizations for unique profiles.

*Soft Skills development* was positioned on par with technical skills in the curriculum. A track of 4 courses on Communication Skills over the first four semesters, course on soft skills for employability and course on Quantitative and Reasoning Aptitude help the students to acquire the necessary skills. A credited course on Yoga (through The Art of Living) and a course Personal Growth Programme (personality typing using MBTI) helped the students building confidence through self- analysis. All these courses are taught by external experts, mostly from the industry.

## 4. NEP 2020 Implementation

Outcome Based Education (OBE) curriculum designed to develop industry-ready graduates has been launched from 2021-22 academic year.

Launched a BTech curriculum with 144 credits, which allows students to develop required employability or research skills through other curricular, co-curricular and extra-curricular activities.

Holistic education is achieved by focusing on overall development of students through courses such as Foundation in Human Values and Ethics, Macro Economics & Personal Finance, Climate Change & Implications, Personal Growth Development, ICT for Development, Innovation & Entrepreneurship, etc. Students have an opportunity to undertake a credit-earning "UBA Project" project for building a socially relevant technology-oriented problem in the villages adopted under *Unnat Bharat Abhiyan*.

Semester-long student exchange programme in the 6<sup>th</sup> Semester with other reputed institutions with *credit-transfer* schemes.

BTech specializations to be earned with 14 additional credits in contemporary areas such as AI & Machine Learning, Cyber Security, Data Science, Cyber Physical Systems, and NextGen Wireless Communications have been introduced to cater to the demand for specialized Engineers by the industry.

Focus UG Research- BTech Honours programme requires additional 16 credits earned through 4-Semester research leading to IP or Prototype or Publications.

I wish the current students leverage the best features of our teaching-learning processes to prepare themselves for a successful career and life.

## 5. Promotion of Research & Scholarly Publications

A positive research culture is created in the institution with adequate support for research. The institute has secured more than 26 research/consultancy projects in the last 5 years with a total value of more than 10 Crores. The journal/conference publications have crossed 200 and 11 patents are filed by the faculty members.

The institute offers PhD and MTech Fellowships out of internal revenues. The institute has graduated 8 PhD students and 10 MS students over these years. A total of 26 PhD students are currently pursuing the PhD programme.

Launched a unique Part-Time PhD programmes with focus on IT professionals and Scientists of Government of India Labs such as DRDO, ISRO etc. We have admitted 13 Part-Time PhD students from leading organizations.

## 6. Innovation & Entrepreneurship

A Technology Business Incubator, Gyan Circle Ventures (CIEDI) has been setup in 2020 with funds Rs. 3.12 Crores through TIDE-2 scheme of MeitY. Inaugurated by the then Minister for Education Hon'ble Shri Ramesh Pokhriyal, GCV has already on-boarded 20 start-ups in varied areas including healthcare, agriculture, energy, etc.

Aligning with national importance, GCV is carrying out other ecosystem development activities to benefit institutions and potential entrepreneurs.

Established E-Cell, a student-led group and the institute hosts Institute Innovation Cell of AICTE, Ministry of Education.

## 7. Promotion of Student Centeredness

Empowering students has become the centre-stage in the new generation institutions. Students are integrated with all activities of the institute through a structured approach. This very approach has led to empowering students and enables achieving unified growth of the institution.

Student Academic Council (SAC) to provide continuous and proactive inputs and feedback on academic systems and processes

Student Development Council (SDC) to lead all the development activities carried out through Technical, Cultural and Social clubs.

Student Life Council (SLC) supports the administration in the areas of Hostels, Mess and Sports through participation in planning and implementation of resources and also to provide appropriate and timely feedback for effective functioning.

## 8. Highly Qualified Faculty Resources

The institute strongly believes in the philosophy that good faculty can guide the students' learning and therefore took efforts to recruit and retain best in class faculty members who are alumni of globally known institutions from India (including top IITs) and abroad.

Systematic recruitment was adopted by conducting a faculty selection process every six months, targeting the upcoming semester. Special efforts are being taken to bring back PhD and Postdocqualified candidates from overseas universities. Clear focus is in place to ensure *regional and gender diversity* among faculty members.

For the first time among government institutions, a structured *performance appraisal and incentive scheme for faculty* has been introduced to attract and retain highly productive faculty from India and abroad.

New faculty are provided opportunities to take up Summer Internship in the industry and such internship periods are treated on-duty and counted as part of annual performance.

We need to thank and support those faculty colleagues who have enabled the planning and led the implementation of all the unique initiatives over the past five years.

#### 9. Faculty Development Scheme

Ministry of Education, Government of India provides Rs. 2.50 Crores for faculty development of IIITs. Most of the IIITs use the Grant for implementing Professional Development Allowance (PDA).

Developed and implemented a unique and special programme for faculty development in order to enable and support vital for implementing new initiatives and desired goals of NEP 2020.

The development areas include- Teaching and Learning, Research and Development, Innovation and Entrepreneurship and Administration and Social Development.

Specific items of development in four areas involving industry, research laboratories, overseas universities, social organizations have targeted outputs, outcomes and impacts.

Young Faculty development programme include Industry Internship in the summer to recent developments in the chosen field.

## **10. Future Bright Innovators Camp for School Children**

The primary objective of the FBI program is to provide a preview to Computer Science & Engineering and Electronics & Communication and encourage creativity and innovations among students.

Organized a 3-day camp in which about 50 students from various schools from Chennai, Bangalore and Nellore participated in the camp.

In 2020 instead, due to the Corona Pandemic, the institute conducted the webinar program as a part of the Future Bright Innovator Program Series, titled "Technology Trends in CSE and ECE - Career and Higher Studies Opportunities".

Faculty of IIIT Sri City got a glimpse of the future students, who showed great eagerness to learn and exhibited tremendous energy in discussions.

### **11. Inclusive Learning Environment**

Launched 'Favourite-25', a mentoring programme for slow learners who are primarily from lower socio-economic and rural backgrounds. Faculty, students, staff and others put in their voluntary efforts to help these students to improve their performance. The programme helps students to achieve the required level of competences and students are fully prepared for moving to higher semesters.

Further, every project-based activity has a combination of students to ensure slow learners have the benefit through peer-learning. Also, Formative Assessment helps the slow learners to pass the courses and progress to higher semesters with confidence.

Students engage with the community through "Unnat Bharat Abhiyan" villages for identifying and supporting development initiatives leading to sustainable growth in villages. These initiatives enable students to develop social focus in their early years.

## 12. Social Development- Unnat Bharat Abhiyan

Adopted 5 Villages under Unnat Bharat Abhiyan in the neighbourhood in 2018 and carried out a number of social development activities in the villages over the last four years. Students have an opportunity to undertake a credit-earning "UBA Project" project for building a socially relevant technology-oriented problem in the villages adopted under Unnat Bharat Abhiyan. A number of activities ranging from medical camps partnering with local hospitals, Digital awareness

creation, rural sports, health-hygiene awareness, computer training for school children, road safety awareness camps, etc. These activities are being enabled or supported by the CSR team of Sri City, the industry partner of the institute.

Signed a MoU with The Art of Living to conduct a credited course on "Foundation in Human Values" to the BTech students. This MoU was signed in the presence of Gurudev Sri Sri Ravi Shankar, Founder of The Art of Living.

Proposal for setting up a 200 Watts ERP Community Radio Station (CRS) is under the review of the Ministry of Information and Broadcasting. The proposed radio to reach 60 villages of AP and Tamilnadu and remote communities living in 2 islands (Irukam and Venadu) located in Pulicat Lake (off Bay of Bengal). The proposed CRS is likely to enable socio-economic development in the local region and also provide an opportunity to the institute for better engagement with the villages adopted under Unnat Bharat Abhiyan.

## **13. Financial and Resource Management**

Management of Financial resources are very critical to the institute which is set up under the PPP model. There is a need to create revenue creating opportunities and simultaneously optimize the operating expenses of the institute both in the short and long terms.

Increase in revenue is achieved by admitting more students through JEE Main, DASA, Study in India programme and Part-Time PhD students.

Optimizing operating cost has been achieved by removing non-value adding activities and resources, and effectively utilizing the existing academic infrastructure.

I am profoundly happy about our students. They always supported the administration despite the fact that the infrastructure has been inadequate. For example, batches of students have graduated without proper sports facilities, workspaces, leisure spots, etc. I would like to apologize to them for not being able to create such infrastructural components due to various administrative hurdles. However, in addition to two large hostel blocks and a dining hall which will be ready for the current academic year, we have now rolled out multiple projects (Hostel block, Indoor stadium, canteen cum student activity center, faculty apartments, compound wall, etc.) with an outlay of Rs.100 Crores and we shall have a completely safe and secured environment in the next 12 to 15 months.

## 14. Preparing the institute for its future -Strategic Advisory Group

In order to have a unified direction and a growth strategy for the institution, I had initiated the efforts of the Board of Governors for launching a 15-Year vision and a 5-Year strategic plan. In this regard, I had also initiated the formation of a Strategic Advisory Group (SAG) with renowned experts from different stakeholder entities such as industry, government, academics, civil societies etc. both from India and abroad. The SAG shall provide valuable inputs and guide

formulation of 15-Year vision and a 5-Year Goals-cum-strategic plan. It is proposed to launch the Vision and the Strategy in the upcoming decennial celebrations of the institute.

# **15.** Nationally Relevant and Internationally Recognized Entrepreneurial Institution

The institute shall continue to focus on *national priorities* to undertake applied research focusing industry and society, produce highly-skilled graduates for jobs in the emerging areas of IT, promote innovation and entrepreneurship, and enable sustainable communities in the neighbourhood. Simultaneously, deploy systematic efforts for achieving a notable *international positioning* through research and academics. These are essentially to be accomplished with the active participation of all stakeholders, especially the Industry Partners.

The institution, being entrepreneurial, required to be nimble, lean, flexible and adaptive in order to leverage the opportunities and manage the challenges, incorporating unconventional approaches.

The institution has to transform in to research institution in addition to the present focus on teaching. There is a need to create research infrastructure, competitive internal research finding to faculty members, renewed focus on promoting UG Research, faculty start-ups, active industry-based research, etc.

A strong foundation characterized by competencies and culture has been established in the first 10 years of the institution. The 15-Year vision and a 5-Year strategic plan shall transform the institute towards the founding vision of emerging as an autonomous, not-for-profit, self-sustaining, research-led education institution.

I take the opportunity to thank the Chairman and members of the Board of Governors for their valuable support during these five years.

Prof. G. Kannabiran Director

## **IIITS as Institute**

## 2.1 About Institute

Indian Institute of Information Technology Sri City, Chittoor known as IIIT Sri City was established in 2013 by Ministry of Education, Government of India as an Institute of National importance by an Act of Parliament with a view to develop new knowledge in Information Technology and to provide manpower of global standards for the Information Technology industry and to provide for certain other matters connected with such institutions or incidental thereto. The partners are Government of India, Government of Andhra Pradesh and Sricity Foundation. The Institute was established in the year 2013 under this scheme in partnership between the Government of India (50% contribution), the Government of Andhra Pradesh (35% partnership) and the Sricity Foundation (15%) partnership.

In the year 2011, the Government of India, Ministry of Human Resource Development, had announced the scheme to set up 20 new Indian Institute of Information Technology (IIITs) under the Public-Private Partnership (PPP) model. The scheme envisages establishment of autonomous, not for profit, self-sustaining, research-led educational institutes which will contribute significantly to the global competitiveness in the key sectors of Indian economy and industry. These institutes are expected to focus on applied research and education in applied IT in selected domain areas. IIIT Sri City Chittoor was registered as a society with the registrar of societies on September 2, 2013 under Societies Registration Act. Subsequently, it was declared as Institute of National Importance by an Act of Parliament vide Gazette of India dated 9th August 2017.

#### 2.2 Mission, Vision and Objectives

#### 2.2.1. Vision

To be a self-sustaining, research-led education institution to contribute significantly to the global competitiveness of key sectors of Indian economy and industry

#### 2.2.2 Mission

Nationally Relevant and Internationally Recognized Entrepreneurial Institution

#### 2.2.3 Objectives

- To provide manpower of global standards to the information technology and electronics industry
- To take up research leading to innovation and entrepreneurship and intrapreneurship
- Engage with local communities and provide technology-based solutions to the problems
- Focus on overall development of the students to make them global citizens

#### **2.3 Governance**

#### 2.3.1 Board of Governors (BoG)



Shri M Balasubramaniam (Bala MS) Board Director & Digital Transformation Leader Chief Executive Officer, STRATINFINITY INC Chairman, IIIT Sri City, Chittoor w.e.f. 26<sup>th</sup> August, 2020

Shri Bala is a seasoned technology leader with a great track record of Building Organizational capability and creating value through technology enabled business transformation with proven Expertise & Leadership in devising and effectuating policies aimed at building and managing multinational Captive's - Global Capability Centers in Banking, Financial Services, Insurance, Software Development, Telecom, Higher Education functions and successfully managed multiple Merger & Acquisitions and Joint ventures globally in the field of technology centers of BFSI and Higher Education functions.

He is having two decades of experience in the IT industry and worked with multiple MNC including Citibank, Polaris, Dun & Bradstreet USA, TransUnion USA. Bala was a founder Director of Higher One India NYSE listed financial service company and Founder Managing Director of Blackboard Inc USA, a world's largest education technology company serving 120 million students covering 2000+ Universities across 90 countries in the world, Managing the R&D Center in India responsible for Product development using exponential technology. Bala has closely interacted with the Higher Education Students, Faculty members and Directors of Universities and Colleges globally, establishing the student's success by providing Software application for assessments of students and faculty members. He is a successful transformational leader in building technology and product engineering centers in India to the global organizations.

Shri Bala was instrumental in building the CIBIL (Indian Credit Bureau) and the Credit Bureau of Sri Lanka, Egypt, UAE- Dubai and Nigeria. He was instrumental in building the captive company's ecosystem (MNC companies) in the State of Tamil Nadu.

Presently Bala is Founder & CEO, STRATINFINITY, a global consulting firm head quartered in USA and having its offices in London UK, Chennai India. Bala is also a General Partner & Chief Digital Officer, PONTAQ UK. Bala is a Board Advisor to some of the IT/ITES/ Startup companies including Change Pond Technologies, Edsix Brain Lab, Thinkinfinity Inc, Ubiquity Inc. to name a few.

Apart from the professional accomplishments above, Bala was instrumental in the Technology Initiatives of Govt of Tamilnadu and building the Tech Captive Global company eco system in the State of Tamilnadu. Shri Bala played key role in various technology Initiatives of Tamil Nadu Police department. Bala works closely with Ministry of Education & MeitY, Government of India on multiple assignments on honorary and advisory roles including the following:

- Chairman of NASSCOM GCC council & Member of GCC National Council between 2017-2019.
- Bala served as Vice Chairman of NASSCOM GCC council for TN and Kerala between 2015-2017.
- Member CYCORD Ministry of Home, Govt of India.
- Member Board of Studies, Ramanujam Institute of Mathematics, University of Madras.
- Board Director, Center for Innovation and Entrepreneurship Development (CIEDI) by MeITY, Govt of India.
- Bala was a Senate member at Madurai Kamarajar University., appointed by His Excellency Governor of Tamilnadu.
- National Board of Advisor, MSME & Startup Forum Bharat.
- National Cyber Security and HR committee member of AMCHAM (2015-2020).
- Committee Member, HR, Education & Skills Development, CII TN Region (2016-2019)
- Part of NETF initial discussion forum held June 2021.

Apart from his Graduation and Post-Graduation in Management from Madras University, he has also an alumnus from IIM-Kolkata, PG in AI/ML from University of Texas and Executive Program in Global Mergers &. Acquisitions from Imperial College of London. His areas of interest include all cutting-edge technologies including Artificial Intelligence, Machine Learning, Block Chain and Data Analytics and pas-sionate towards building the Industry-Academia collaboration that paves way for Outcome Based Education

His areas of interest include AI/ML, Cyber Security, Digital Twin, Quantum computing, Data Governance, Digital Privacy, XaaS (Everything as a Service) & IoB (Internet of Behaviors).

Areas of Focus: Startup- Industry - Academia collaboration; New Captive Centers (R&D GCC's) in India, OBE across the Higher education in India, Upskilling & Reskilling among the students for industry readiness, India to be the world's digital society.

#### Members:



Shri Rakesh Ranjan Additional Secretary (Technical Education) Department of Higher Education, MoE New Delhi

Shri Rakesh Ranjan is a Mechanical engineering graduate from IIT Kanpur, He joined the Indian Administrative Service (IAS) in 1992. During the last over 25 years, He served for over 14 years in some of the most difficult regions of India (states of Tripura, Jharkhand and Manipur), and 5 (five) ministries/ departments of the Government of India- Defense, External Affairs, Culture, Higher Education and Pharmaceuticals.



Shri J.Syamala Rao, IAS Secretary to Government Higher Education Department

#### **Government of Andhra Pradesh**

Shri J. Syamala Rao is the Secretary to Govt. of Andhra Pradesh, Higher Education Department/ Principal Secretary (HE), Govt. of Andhra Pradesh. He is an Indian Administrative Service officer of 1997 batch cadre.



Shri Srinivasa C. Raju Chairman, Sricity Foundation

Shri Chintalapati Srinivasa Raju is the Chairman of Sri City, which is the largest Integrated Business city in South India.

Shri Chintalapati Srinivasa Raju, widely known as Srini Raju, is an Indian Entrepreneur, and Private Equity Investor. Srini Raju was the Founding CEO & MD of Dun & Bradstreet Satyam Software, the in-house technology unit of Dun & Bradstreet, established in 1994, which focused on implementing large-scale IT projects for Dun & Bradstreet businesses. DBSS was later renamed as Cognizant.

Srini later became the Co-founder and Chairman of Peepul Capital (successor to iLabs Venture Capital Fund), a Private Equity (PE) firm based out of Hyderabad and Chennai. Besides funding and mentoring next generation entrepreneurs, he plays an active role in building educational institutions of higher learning.

Srini has an MS in Civil & Environmental Engineering from Utah State University, USA and a BS in Civil Engineering with Honors from REC (NIT), Kurukshetra.

Srini is passionate about Education and Skills Development. He is a Founding-Member & Member of Governing Council of International Institute of Information Technology (IIIT), Hyderabad; Industry Partner (Donor) & Member of Board of Governors of Indian Institute of Information Technology, Sri City; Executive Board Member of Indian School of Business (ISB) and Benefactor of SriniRaju Center for Networked Economy (SRITNE); Co-Sponsor (Donor) and Board Member of KREA University; and Founding-Member & Board Member of T-Hub, Hyderabad.



Shri Ravindra Sannareddy Managing Director, Sri City (P) Ltd

Shri Ravindra Sannareddy is the Managing Director of Sri City, which is the largest Integrated Business City in South India. He has been involved in creating and sustaining high-tech ventures for close to two decades. Today, Ravi is an established industry-captain with diverse interests in Infrastructure Development and other allied businesses.

Shri Ravi also personifies the success story of a young first-generation entrepreneur who has his roots in rural background and who has grown his personal stature and his businesses to immense international scale and size in a short span of time.

As a "son of the soil", he decided to give back to the society and uplift the economically backward region where he was born. He amalgamated his extensive experience gained by living and doing business abroad with his strong roots in the local communities in creating Sri City, a striking example of new urbanism in India. He has been successfully leading his team to accomplish his mission to make Sri City, as the destination for the best companies of the world.

He holds an M.S.E Degree in Environmental Engineering from the Johns Hopkins University, Baltimore, Maryland, USA and an M.S. Degree in Water Resources Management from Utah State University, Logan, Utah, USA and a B.S. Degree in Civil Engineering from National Institute of Technology (formerly REC), Tiruchirapalli, Tamil Nadu, India. He is a Member of Board of Governors of Indian Institute of Information Technology, Sri City.



Shri. Srinivas Peddada Senior Advisor General Atlantic India & Southeast Asia, Hyderabad

Srinivas Peddada is a Senior Advisor at General Atlantic, drawing on more than 25 years of experience in IT applications and infrastructure to provide strategic support and advice to the firm's investment teams and portfolio companies in the Technology sector in India & Southeast Asia. Before joining General Atlantic in 2020, Srinivas was holding the following positions.

- Chief Information Officer-Bharat Financial Inclusion Ltd 2012 –2020:
- Chief Information Officer-D&B South Asia, Middle East & North Africa Group 2007 2012
- Chief Technology Officer, AIG (2006 2007)
- Chief Technology Officer, GE Finance India Region and GE global support team (2005-2006)-Managing Technology Strategy and Operations
- Chief Architect, IBM: 1995 2005
- Senior Systems Analyst, TCS (1992-1995)



Ms. Shalini Kapoor President & Chief Technologist AWS India

Shalini Kapoor drives research, strategy, and development to maximize the infusion of AI. She is leading IBM's AI market-leading capabilities, driving consistent, re-usable implementation patterns, business transformation and value, and making AI accessible and useable to business users, and not just data scientists. She leads innovative and engaging programs to enhance AI skills and adoption within Cognitive Applications and across the India Software Labs. She is an innovator and technology Strategist with 23 years of work experience. Her expertise lies in

developing product strategy to drive business imperatives, leading software product development and building high performing global teams. She is a powerful blend of technology vision and business acumen with proven architectural skills in complex solution development across industries. She is widely known for incubating and innovating next-gen solutions based on clients' requirements.



Shri. Bhuvan Anandakrishnan Director & Centre Head Caterpillar Technology Centre-India, Chennai

Shri Bhuvan Anandakrishnan is the Director of Electrical, Electronics & Software Technology, within Caterpillar India. Bhuvan acquired his bachelor's degree in Electronic Engineering from Madras University and a Master's degree in Business Administration from Great Lakes Institute of Management. He also has a Management Diploma from Bradley University, USA. Bhuvan has 21+ years of Industry experience of in the areas of Embedded Firmware Development, Machine & Engine Control Systems, HMI, Telematics, Autonomy & Automation, Cloud Technologies, Edge Computing & Advanced Analytics. He has Served in a variety of engineering, strategy development and leadership positions within Caterpillar Inc and has been a Key member in establishing its Electronics & Software Development Competency in India. He is also Providing Industry leadership as Chairman for NASSCOM GCC council in TN and Kerala region.



Prof. P. J. Narayanan Director International Institute of Information Technology, Hyderabad

Prof. P J Narayanan is the Director of IIIT, Hyderabad and a researcher in the areas of 3D vision, computational cameras, and parallel computing. He built the Virtualized Reality system in mid 1990s at the Carnegie Mellon University to capture 3D geometry and appearance of dynamic events. He also was an early adopter of GPUs for several Computer Vision and general computing tasks. He got his Bachelors (1984) from IIT Kharagpur, Masters and PhD (1992) from the University of Maryland, all in Computer Science. He was a research faculty member at the Robotics Institute of CMU from 1992 to 1996 and headed the Vision and Virtual Reality groups of the Centre for Artificial Intelligence and Robotics, Bangalore from 1996 to 2000. He has been with IIIT Hyderabad from 2000 and has been its PG Coordinator, Dean of Research, and, from 2013, the Director. He was the President of ACM India from 2009 to 2014 and has involved with various activities of ACM such as Awards, Technology Policy, etc.



Prof. Partha P. Chakrabarti Professor of CSE & Former Director Indian Institute of Technology Kharagpur

Prof. Partha Pratim Chakrabarti completed his B.Tech in 1985 and PhD in 1988 from the Dept of Computer Science & Engg, Indian Institute of Technology (IIT) Kharagpur. He joined the same department as a faculty member in 1988 and is currently a senior Professor. From July 2013 he was the Director of the IIT Kharagpur till June 30, 2019. He was the Professor-in-Charge of the state-of-the-art VLSI Design Laboratory which he helped set up and has been the Dean of Sponsored Research and Industrial Consultancy at IIT Kharagpur and Head of the Advanced Technology Development Centre. He was also the co-Director of the strategic General Motors-IIT Kharagpur Collaborative Research Laboratory on Electronics, Controls and Software. He held additional charge as Director IIT Patna and IIIT Kalyani. He has worked closely with Industry and Government and has successfully completed projects totaling worth more than several hundred crores with MoE, DST, CSIR NMITLI, MeiTy, DHI, INSA, Volkswagen Foundation, Intel, Synopsys, Google. National Semiconductors, General Motors to name a few. He is the architect and overall coordinator of National Initiatives like the National Digital Library of India (https://ndl.iitkgp.ac.in), Global Initiative for Academic networks or GIAN (www.gian.iitkgp.ac.in), SPARC (sparc.iitkgpac.in), IMPRINT, etc that are emerging as game changers in India's higher education scenario.



Prof. K.N. Satyanarayana Director Indian Institute of Technology Tirupati, Andhra Pradesh

Dr. Kalidindi N. Satyanarayana is currently the Director of IIT Tirupati, Andhra Pradesh. He has been a Professor in the Building Technology & Construction Management Division of the Department of Civil Engineering at the Indian Institute of Technology Madras, Chennai, India.

He received his B. Tech degree in Civil Engineering from IIT Madras. He then received MS and PhD degrees with specialization in Construction Engineering and Management from Clemson University, USA. He has been a faculty member at IIT Madras since 1991. In 2009 he was a Visiting Professor at lowa State University, USA. At IIT Madras he served as Advisor - Alumni Affairs (2004-2009) and Chairman - Engineering Unit (2010-2013). He is currently Chairman of the Implementation Committee for IIT Madras Research Park - Phase II (one million sq. ft. facility). He has served on the committees for setting up new campuses including IIM Trichy, IIT Indore and IIT Jodhpur. He is Chairman of the Academic Advisory Group, Project Management Institute (PMI); Vice Chairman, Board of Advisors of The Glass Academy; Expert Member on the Board of Management of Building Materials & Promotion Council (BMTPC), and serves as Independent Director on five company boards.



Prof.K.Siva Prasad Associate Professor, IIIT Sri City

Prof. Siva Kotamraju received PhD degree in Electrical Engineering from Mississippi State University in 2010. His PhD was focused on epitaxial growth of Silicon carbide at low temperatures using MOCVD. From 2011 to 2012, he worked as a GaN/GaAs epitaxy development process engineer at Aixtron, Inc, California, USA. Dr. Siva Kotamraju worked for a semester at VIT University Vellore before joining IIIT SriCity. Since 2014, he has been working as an Assistant/Associate Professor at Indian Institute of Information Technology, SriCity, Andhra Pradesh, India. During his tenure at IIIT Sri City, he has completed funded projects from DST and ISRO, and graduated two PhD students. His current research interests include TCAD modeling of Silicon carbide power devices for high voltage applications and GaAs based multi-junction solar cells for space applications.



Prof.Y.Raja Vara Prasad Assistant Professor, IIIT Sri City

Dr. Raja Vara Prasad completed his M.Tech from IIT Kharagpur and Completed PhD from IIT Hyderabad. Dr. Raja Vara Prasad has been with the Indian Institute of Information Technology (IIIT), Sri City since June 2016, where he is currently the Assistant Professor of Electronics and Communication Engineering. His research interests includes Wireless Sensor Networks, IoTs, and Unmanned Aerial Vehicles (UAVs). He also worked for different sponsored projects such as Pervasive Sensor Networks theme of Indo-UK IUATC in the year-2010-2011, Smart buildings of Cyber Physical Systems (CPS) hub and Internet of Things project of IITH from 2012 to 2015. He worked for different product development projects like "Power monitoring module" for smart building, "Building Energy Manager", "Air pollution Monitoring" node design with networking capabilities and Monitoring modules for electrical distribution systems from 2008 - 2015. He is presently working on funded projects like "Sensors, Multihopping and Analytics - for Real-Time inter-connection of Village Wells (SMART Village Wells)" funded by ICPS-DST. He is also collaborating with Dr.Huan Nguyen of Middlesex University of London on "Digital Twin Modelling for Automation, Maintenance Monitoring in Industry 4.0 Smart Factory" project sponsored by DST under Indo-UK UKIERI scheme. He is also working as one of the Co-Investigator in the multidisciplinary and multi-institute project titled "Design and Fabrication of Autonomous Passenger Drone" sponsored by the MeitY India from May 2019. He is also the PI

of the ongoing project "Advanced Aerial Mapping (AAM) Rider: Yield Detection System for Mango Farms using UAVs" funded by TiHAN-IIT Hyderabad.



## Prof. G. Kannabiran Director, IIIT Sri City Chittoor

Dr. Ganesan Kannabiran Professor (HAG) of Management Dr. Ganesan Kannabiran is a senior Professor of Management at the National Institute of Technology, Tiruchirappalli with over 25 years of experience. He has served as Head of the Department for several years and Dean of Research & Consultancy at the institute level. He also served as the Director i/c of the institute for a brief period from June- November 2016.

He is a recipient of Commonwealth Professional Fellowship (Edinburgh Napier University, UK-2015), Two Fulbright Fellowships (Education Administrators Programme-2011, Fulbright Visiting Lecturer at Oklahoma State University-2015), and British Council Study Fellowship (Huddersfield University UK-1997). He served as the National Expert for an international research study supported by Asian Productivity Organization on Measuring Productivity in Higher Education.

As the Founder Director of Center for Entrepreneurship Development and Incubation (Section 8 Company promoted by NITT), he obtained a major grant of INR 15.5 M from Ministry of Information Technology, Government of India for creating an incubation facility and to support innovative business ventures through seed funding. He has led the institute to win "High Impact Entrepreneurship Campus Award 2015" jointly conferred by Government of India. He led the efforts to secure corporate funding of INR 1.2 Crores from Sonata Software Ltd for supporting the innovation and entrepreneurship development efforts.

## Prof.G.Kannabiran

Director & Registrar Incharge (Additional charge as Registrar Incharge from 27th August, 2019 till 7<sup>th</sup> December, 2022)



## Col.T.Umasankar, Retd

Registrar

Col T. Umasankar (Retd.) has taken charge as Registrar of IIIT Sri City Chittoor Sri City with effect from 08th December 2022.

Col T. Umasankar is an Army veteran with over 30 years of service in the Indian Armed forces. He comes with diverse work experience, in Military operations, Military Logistics and Supply chain, and Warehouse management. He received his MBA from IIT- Madras and pursuing his Ph D in the field of Behavioural finance from Amity University. As the youngest army officer, he was part of the Integrated Guided Missile Development (IGMDP) Programme of Dr. Abdul Kalam, at DRDL- Hyderabad. His varied experience as an Army Officer includes leading multiple teams in the entire gamut of Logistic

functions, always at the forefront of the design of Facilities and Administrative setup for the security and safety of all assets, under a variety of work settings and environments.

Post-retirement from the Indian Army, he joined as AGM in Indian Bank, heading the Security vertical of Indian Bank with Pan India Jurisdiction. During his tenure, he successfully implemented strategic initiatives by realigning the security roadmap with Business Continuity Planning. He remodeled security planning by spreading security consciousness through innovative methods and preparing action plans involving stakeholders.

As a Commanding Officer of the NCC unit, he imparted military training to student cadets and played a key role in their talent identification, for their development, motivation, and leadership training toward nation-building. He is honoured by Govt of Telangana for his contribution to youth development as NCC Commanding Officer, on 15 Aug 2018.

Chairman	Shri M. Balasubramaniam Chairman, IIIT Sri City Chittoor w.e.f. 26 <sup>th</sup> August, 2020
Members	Shri Anil Kumar, Director (Finance), IFD Section Department of Higher Education (TS-1) Ministry of Education
	Sri J Syamala Rao, IAS Secretary to Government, Higher Education Department, Government of Andhra Pradesh
	Shri Srinivasa C. Raju Chairman Sricity Foundation
	Prof. G. Kannabiran Director IIIT Sri City Chittoor

## 2.3.2 Finance Committee

## 2.3.3. Building and Works Committee

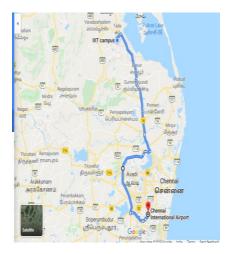
Chairman	Prof. G. Kannabiran Director IIIT Sri City, Chittoor	
Members	Prof. P. Krishna Associate Professor & HoD Dept. of Civil Engineering, IIT Tirupati	-Nominee of the MoE, GoI
	Shri. Y. Venkatapathi Rao Joint Secretary to the GoAP Department of Higher Education	-
	Shri Srinivas Tallapragada Independent Projects & Facilities ( (Nominee of Industry Partner)	Consultant
	Prof. A. Mehar Prasad Professor Structural Engineering Division, II	-Board Nominee T Madras

Four	Mr. U. Sarath Chandra Kanth -Board Nominee Founder and Principal Architect DesignTech Chennai 		
Secr			
2.3.4 Senate			
Chairperson Ex-Officio	<b>Prof. G. Kannabiran</b> Director, IIIT Sri City Chittoor		
Three persons from amongst Educationists of repute And not employees of the Institute	Prof. C. V Jawahar- Special Invitee Professor & Dean (R&D) IIIT Hyderabad		
	<b>Prof. Debdeep Mukhopadhyay – Member</b> Professor, Dept. of CSE IIT Kharagpur		
	<b>Prof Balaraman Ravindran - Member</b> Professor IIT Madras		
Three persons who are not Members of teaching staff Specialized knowledge	<b>Dr. Chandramouliswaran V - Member</b> VP Risk Management India Paypal Chennai.		
	<b>Dr. Partibha Moogi - Member</b> STSM, IBM, Bangalore		
	<b>Dr. Parthasarathy Ramaswamy - Member</b> Senior Principal Engineer Intel Bangalore		
Ex-Officio Secretary	Col.T.Umasankar, Retd. Registrar IIIT Sri City, Chittoor		

#### 2.4 Campus and location

The Campus spreads across 81 acres and is equipped with state-of-the-art Infrastructure in Sri City. Located 55 km north of Chennai on the Nellore Highway, Sri City boasts of seamless connectivity by road, air etc. (Visit: http://www.sricity.in). IIIT Sri City is located in Sri City, a decade old state of the art industrial city spread over 8000 acres encompassing a multi-product Special Economic Zone (SEZ), Domestic Tariff Zone (DTZ), Free Trade & Warehousing Zone (FTWZ) and Electronics Manufacturing Cluster. Sri City is hosting about 180 companies from 30 countries. The institute has access to the industries and social infrastructure available in Sri City through the Industry Partner.





## 2.5 Infrastructure

The Institute started functioning from its own premises from the academic year 2018-19 with partial facilities.

## Academic Block







## Classrooms





Class Room with 60 seating Capacity



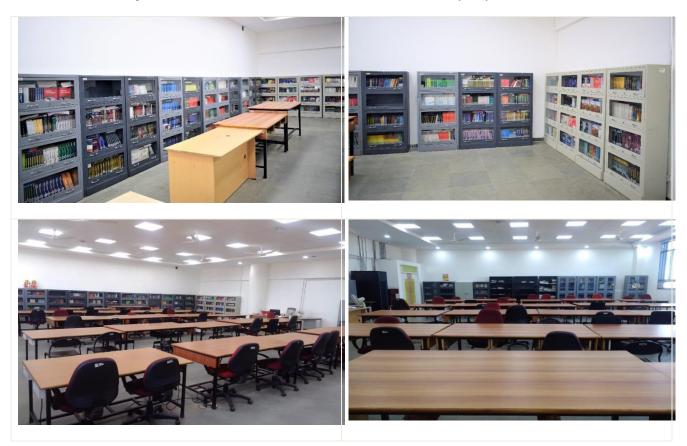
Class Room with 120 seating Capacity

## Additional faculty cabins



#### Library

Major events in the academic year 2022-23, for the IIIT Sri City library. As shown in the photographs below, the total area of the Library is 1905 sqft with a seating capacity of up to 50. There are 23 racks with a total capacity of 3012 books including CSE, ECE, Mathematics and Humanities. This number may vary based on the book size.



A number of textbooks, reference and research related books were purchased as shown in table below: Details of expenditure on academic books at IIIT Sri City during 2022-23

S.No.	Department	No. of books	Cost Rs.
1	ECE	2	12,275
2	Mathematics	10	7,370
3	CSE	20	11,380
4	General	10	4,633

## Labs



Computer Labs with 125 seating capacity



Electronic Labs with 100 seating capacity

## Hostels



Hostels and Dining Hall Facility



Dining Hall



Sports Facilities

#### 3. Admissions

#### **3.1 UG Admissions Policy:**

IIIT Sri City offers Undergraduate Programs focused on Information Technology

- B. Tech in Computer Science and Engineering (CSE)
- B. Tech in Electronics and Communication Engineering (ECE)

#### Admission under JoSAA/CSAB:

IIIT Sri City adheres to Central Educational Institution Reservation as per Admission Act. Admission is based on the joint entrance examination (JEE Main). Notification of JEE Main is announced in dailies across India during September – December and is conducted in the month of May every year in various centers across India. Admissions are open to all classes, religions, races and genders including transgender. B.Tech admissions into CSE and ECE programs are done through JoSAA/CSAB.

Based on the merit ranking in JEE Mains, the Joint Seat Allocation Authority (JoSAA) or the Central Seat Allocation Board (CSAB) invites candidates for an online counseling session to choose the institute of their choice. JoSAA or CSAB announces the seat allocation process and IIIT Sri City plays no role in seat allocation to students. Merit is the only criteria for admission into IIIT Sri City. For further details on the admission process, please visit website www.josaa.nic.in.

# 318 students were admitted into the 4 year B.Tech programme in CSE and ECE through CSAB/JoSAA.

#### Admission under DASA and Study in India Programme:

The institute has taken up steps for admission of overseas students through DASA and Study in India Programme, starting from 2019-20. It is proposed to accommodate a maximum of 15% of seats for DASA under Non-SAARC category. Under the Study in India programme, the institute will be offering a 25% fee waiver for 20% of the students, subject to a maximum of 40 students in CSE and ECE programmes. In addition, as a part of the Study in India and UK Education and Research Innovation partnership (UKIERI), IIIT Sri City will be accommodating students from specific universities from the UK to spend a minimum of two weeks to 6 month stay at IIIT Sri City.

#### 6 students admitted into the 4 year B.Tech programme in CSE through DASA.

For more details about DASA visit www.dasanit.org

For more details about https://www.studyinindia.gov.in/

#### **3.2 PG Admissions Policy:**

Recognizing the growing importance of Artificial Intelligence & Machine Learning and Cyber Security, the institute senate comprising of leading visionaries in the field of Information Technology namely Prof. C.V. Jawahar, Professor, IIT Hyderabad; Prof. Devendra Jalihal, Professor, IIT Madras, Prof. M. Balakrishnan, Professor, IIT Delhi, Prof. S. Sudarshan, Professor, IIT Bombay, Dr. Gargi B Dasgupta, Director, IBM, Mr. Kannan Babu Ramia, Principal Engineer, Intel, and Mr Srikumar Sreedharan, Product Head, TCS have structured and approved industry-tailored two year M.Tech programmes with emphasis on outcome-oriented curriculum. At present, IIIT Sri City offers two specialized Postgraduate Programs

- M. Tech in Artificial Intelligence & Machine Learning
- M. Tech in Cyber Security

Institute offers admission to GATE qualified candidates through CCMT and non-GATE candidates through institute level selection process. For each programme, fifteen seats are available through CCMT and fifteen seats through the institute selection process. Institute adheres to the reservation policy as per GOI rules.

#### Admission through CCMT for GATE Qualified Candidates:

GATE candidates with B.Tech./B.E. in CSE/ECE/equivalent branches are eligible to apply for admission through Centralized Counseling for MTech (CCMT) 2022 portal. In the GATE category, candidates should have a valid GATE score and candidates have to follow the procedures of CCMT for the admission. The eligibility criteria for the GATE candidates will be governed by the CCMT rules. Further details on the admission process is available at: <u>https://ccmt.admissions.nic.in/</u>

#### Admission through Institute Level Selection process for Non-GATE candidates:

Non-GATE candidates with B.Tech./B.E. in CSE/ECE/equivalent branches are eligible to apply for admission through the institute admission process. In the qualifying degree, the candidates should have passed and secured at least 6.5 CGPA (on a 10-point scale) or 60% for GEN/GEN-EWS/OBC, whereas 6.0 CGPA (on a 10-point scale) or 55% in case of SC/ST/PwD candidates.

Non-GATE candidates with an undergraduate degree from CFTI institutes will be screened on the basis of their previous academic records and must have at least 8.0 CGPA. The screened candidates have to appear for a Coding Test and an Interview at IIIT Sri City. Non-GATE General candidates (Non-CFTI or CFTI with < 8.0 CGPA) will be screened on the basis of their previous academic records. The screened candidates have to appear for a written exam at IIIT Sri City. The syllabus of the test is similar to GATE. The outcome of the test will be used to do the second screening. Those who pass the second screening have to appear for a Coding Test and an Interview at IIIT Sri City. Candidates with work experience will be given additional weightage in the selection process.

The detailed eligibility criteria and information regarding the institute selection process is available at: <u>https://www.iiits.ac.in/admissions/m-tech-programme/</u>

In 2022-23 academic year, one student was admitted to the M.Tech AI&ML programme through the institute selection process and one student was admitted through GATE category via CCMT.

Also, in 2022-23 academic year, none of the student was admitted to M.Tech Cyber Security programme.

#### **3.3 PhD Admission Policy:**

Doctoral Programme leading to Ph.D. is offered in the following branches of the Institute:

- i) Computer Science and Engineering
- ii) Electronics and Communication Engineering.
- iii) Mathematics & Data Science

In IIITS there is a provision for 2 categories of registration to the candidates willing to register for PhD Scholars who are willing to pursue Research Studies on a full-time basis can choose **full-time PhD** and working professionals from Govt. R&D Organizations / IT Professionals can choose a **part-time PhD**. Admissions into PhD programs are done twice in a year, during Monsoon and Spring.

#### Full-time PhD in CSE / ECE

Candidates with a good academic record with M.E. / M.Tech. / M.S. or equivalent degree in any branch of Engineering/ Technology (OR) Exceptional candidates with Master's in Statistics / Mathematics / Master of Computer Applications / Electronic Sciences / Computer Science / Information Technology (or an associated area with strong background in mathematics and programming), or any other related subjects (OR) Exceptional candidates having B.E. / B.Tech or equivalent degree with a CGPA of 9.0 or above and demonstrated research capability by means of research papers, IPs and similar research outcomes may also be considered.

#### **Part-time PhD in CSE / ECE**

Working IT Professionals with rich technical background from IT industry/MNCs with employment and residence based in India or Scientists working in Govt. of India Research labs such as DRDO, ISRO etc are eligible to apply. Additionally, the candidates should also fulfill any one of the following criteria: At least a First class Master degree in the applicable areas or Exceptional candidates having B.E. / B.Tech. in applicable areas. In both cases, the candidate having Master degree should have at least 2 years documented industrial experience in reputed MNCs OR Bachelors degree having 5 years documented industrial experience in reputed MNCs.

#### Admission Process

- Satisfying the minimum eligibility criteria
- Candidates recommended by the PhD Admissions Committee will be called to appear for a written test.

• The candidates shortlisted based on the written test performance need to appear for a personal interview before the Ph.D. Admissions Interview panel.

Selection in Ph.D. programmes will be based on merit. The merit list for all the candidates in each category (Institute scholarships, industry personnel) is based on the cumulative score in the written test, interview, marks in UG / PG, experience, and publications. Considering the background experience, greater weightage may be given for the interview and other components (such as academic qualifications, research publications / patents, work experience, etc.)

9 students were admitted into the PhD programme in Monsoon 2022 and Spring 2023. The total number of students during this period was 34.

#### 4. Academic Programs

#### 4.1 Undergraduate

#### Undergraduate Curriculum

IIIT Sri City, Chittoor was mentored by IIIT Hyderabad in the first 6 years. The curriculum at IIIT Sri City follows a practice-theory-practice approach wherein the students are first introduced to real-world engineering concepts by providing hands-on-training. This is followed by rigorous theory-based courses which is again followed up with hands-on courses with intense real-world projects, requiring intense involvement from each student. The curriculum has been designed keeping in mind the best practices of IIIT Hyderabad, IITs and leading institutions of higher learning globally. The Institute combines top class education with pioneering research, whereby under-graduate students are encouraged to participate in different research and technology development projects, starting from the end of 2<sup>nd</sup> year. Notably, the curriculum offers the flexibility of Honors program, wherein the student can hone their skills by working on a specific area for a period of 2 years and bring in a substantial impact on their area of interest. It is proposed to offer Minors in areas such as Cyber Security, Cyber Physical Systems, Smart Manufacturing, AI & Machine Learning, FinTech, Bio-Informatics, Blockchain, etc. In addition, it is proposed to offer a semester-long project in an Industry or at a reputed research lab, as part of the curriculum.

#### Undergraduate with specialization

At IIIT Sri City, the eligible students could pursue B.Tech. with a specialization in AI & ML, Cyber Security, Data Science, Cyber physical systems, and Next Generation Wireless Communication by doing additional credits and semester long internship projects.

#### Specialization in AI ML

Artificial Intelligence has emerged with its potential ability to solve complex societal problems of recent times including education, healthcare, security, information forensics, visual understanding, efficient transportation, increased efficiency in providing e-governance services to the public, etc. Many countries have made focused national efforts. The Government of India has also initiated widespread discussion on the role of AI in India. Niti Ayog has suggested the dedicated AI plan to the Govt. of India. Moreover, the top IT industries such as Google, Amazon, IBM, Microsoft, etc. have invested huge funds in AI based research and development in recent days. Many startups are also emerging nowadays in AI across the globe.

Being an Institute of National Importance in Information Technology, the specialized B.Tech. The Programme in Artificial Intelligence & Machine Learning will boost the IIITS ecosystem further and will produce highly skilled manpower. The B.Tech. in Artificial Intelligence & Machine Learning aims to bridge the urgent needs of the industry and to produce the high-end AI scientists and engineers for the society. The primary aim of this specialized program is to produce graduates by providing rigorous training in the priority areas of Artificial Intelligence. The B.Tech. with a specialization in AI & ML would strengthen the students such that they can become AI world leaders and shape India's future in a better way.

Artificial Intelligence and Machine Learning (AI & ML) has been identified as one of the top areas for jobs and research. This domain will have more jobs as compared with any other plain B.Tech programme in CSE alone. Our institute took so many efforts to launch a specialization in AI & ML to provide our students preparedness to meet the demand of Engineers with AI & ML knowledge and skills. So, it is advisable to the current final year students to opt for the specialization in Artificial Intelligence and Machine Learning. This would maximize your chances to get placed in a good company and a decent salary.

For a plain B.Tech degree in CSE with AI & ML specialisation, the current final year students will have to complete 156 credits. For B.Tech with Honors, students have to complete 164 credits.

Additionally, Students may opt for the following courses that are offered with practice-oriented learning as part of the specialization in AI & ML:

a) Deep Learningb) Reinforcement Learningc) Soft Computing and Evolutionary AId) Industry Applications of AI & MLe) Semester Long Project

The items a) - c) carries 3 credits each and d) carries 1 credit, these courses involves teaching by experts from industry and academia. The semester long project carries 8 credits and the work should be carried out in industries that engage in AI & ML. Thus, in total, a student opting for AI & ML specialization should take 14 credits additionally to earn B.Tech. degree with a specialization in AI & ML.

#### **Specialization in Cyber Security**

Cyber Security jobs that are available currently and in the subsequent years are outstripping the supply of IT jobs. The inference is that there is an increasing demand for Cyber Security professionals but the companies are finding that there is a lack of people with Cyber Security profiles. In fact, NASSCOM has called to create one million Cyber Security jobs before 2025 (to

meet the demands) and all these point to the pressing need to create this expertise in the university for students graduating in the coming years. In the presence of such opportunities, we focus on developing expertise in Cybersecurity through specialized post graduate programme in cyber security.

B.Tech. with a specialization in Cyber security is aimed at preparing brilliant minds to meet the requirements of highly skilled manpower in the area of Network and Data Security. IIIT Sri City Community is well connected with various top-tier industries that work in various thrust areas of Information Security. The proposed specialization consists of a variety of courses from information security, and some of the advanced electives in the respective field.

For a plain B.Tech degree in CSE with Cyber Security specialisation, the current final year students will have to complete 156 credits. For B.Tech with Honors, students have to complete 164 credits.

Additionally, Students may opt for the following courses that are offered with practice oriented learning as part of the specialization in Cyber security:

- a) Network and Data Security
- b) Threat Intelligence
- c) Software Security
- d) Cyber security Regulations
- e) Semester Long Project

The items a) - c) carries 3 credits each and d) carries 1 credit, these courses involves teaching by experts from industry and academia. The semester long project carries 4 credits and the work should be carried out in industries that engage in Cyber Security. Thus, in total, a student opting for Cyber Security specialization should take 14 credits additionally to earn B.Tech. degree with a Specialisation in Cyber Security.

#### **Specialization in Data Science**

There is an increasing demand for Data Scientists in every corner of the world because almost all types of the industries are inclined to make data driven decisions. Data Science jobs have consistently been in high demand since the last 5 years. This trend signifies that around the world as well as in India, there is a high demand for data scientist professionals who are well versed in various aspects of data science.

Whereas it can be easily perceived, being a relatively new field, the supply of the Data science skilled resources is still quite low. Not only in quantity, the quality of the jobs is also very lucrative, whether in terms of remuneration or sophistication. Healthcare, aviation, manufacturing, automobile, IT services, ecommerce, Pharma, financial institutions, infrastructure, entertainment, FMCG are examples of few sectors where data science has become

an essential component of their businesses. A few industrial research laboratories and academic institutes across the globe have already shown their efforts on research and development in this area.

For a plain B.Tech degree in CSE/ECE with Data Science specialisation, the current final year students will have to complete 156 credits. For B.Tech with Honors, students have to complete 164 credits.

Additionally, Students may opt for the following courses that are offered with practice-oriented learning as part of the specialization in Data Science:

a) Advanced Data Analytics
b) Big Data Analytics
c) Python for Data Science
d) Industry Applications of Data Science
e) Semester Long Project

The items a) - c) carries 3 credits each and d) carries 1 credit, these courses involves teaching by experts from industry and academia. The semester long project carries 8 credits and the work should be carried out in industries that engage in Data Science. Thus, in total, a student opting for Data Science specialization should take 14 credits additionally to earn B.Tech. degree with a specialization in Data Science.

#### Specialization in Cyber Physical System

Cyber Physical System (CPS) is an amalgamation of physical processes, wireless networking and extensive computing. The physical processes are monitored with varied sensors and then communicated through networking to create an automated feedback-based embedded control system. The automated/ smart systems are modeled from the data points through technological abstractions of data analytics, machine learning and pattern recognition.

Over the last 3-5 years, there has been an exponential growth in the number of companies pursuing this area and offering technological opportunities. In this regard, given the large number of applications in manufacturing and electronic-based industries, IIIT Sri City offers BTech program with specialization in CPS. IIIT Sri City is the first IIIT and one of the few Universities in India to offer such a specialization for BTech students. It is an interdisciplinary program that would train and prepare students for the next wave of required technological skill-sets.

For a plain B.Tech degree in ECE with Cyber Physical System specialisation, the current final year students will have to complete 156 credits. For B.Tech with Honors, students have to complete 164 credits.

Additionally, Students may opt for the following courses that are offered with practice-oriented learning as part of the specialization in Cyber Physical System:

a) Internet of Things
b) Intelligent and Autonomous Systems
c) Digital Twins: Concepts and Applications
d) Seminar Course
e) Semester Long Project

The items a) - c) carries 3 credits each and d) carries 1 credit, these courses involves teaching by experts from industry and academia. The semester long project carries 4 credits and the work should be carried out in industries that engage in Cyber Physical Systems. Thus, in total, a student opting for Cyber Physical System specialization should take 14 credits additionally to earn B.Tech. degree with a Specialisation in Cyber Physical System.

Moving forward, the Institute aims to set-up a CPS/IIoT lab for Master's program wherein we would collaborate with the Hi-Tech manufacturing industries in Sri City.

#### Specialisation in Next Generation Wireless Communication

5G wireless communication technology is designed to deliver higher multi-Gbps peak data speeds, ultra-low latency, more reliability, increased network capacity, and a more uniform user experience. 5G would be based on LTE and would be an amalgamation of several independently developed technologies such as Massive MIMO, UWB, NOMA, etc; with an evolved packet core and cloud-based radio access network. For successful deployment of 5G wireless systems, it is essential to comprehend and design each technology, while providing an intelligent integration of the same.

For a plain B.Tech degree in ECE with Next Generation Wireless Communication specialisation, the current final year students will have to complete 156 credits. For B.Tech with Honors, students have to complete 164 credits.

Additionally, Students may opt for the following courses that are offered with practice-oriented learning as part of the specialization in Next Generation Wireless Communication:

- a) Wireless Communication
- b) Advanced Wireless Communication
- c) 5G Technologies and Applications
- d) Seminar Course
- e) Semester Long Project

The items a) - c) carries 3 credits each and d) carries 1 credit, these courses involves teaching by experts from industry and academia. The semester long project carries 4 credits and the work should be carried out in industries that engage in Next Generation Wireless Communication. Thus, in total, a student opting for Next Generation Wireless Communication specialization

should take 14 credits additionally to earn B.Tech. degree with a Specialisation in Next Generation Wireless Communication.

#### Focus on UG Research through Honors Programme

In order to promote UG-Research, we have a unique Honours programme wherein the students can work on a particular area under a faculty or group of faculties for a period of 4 semesters. They earn their Honours degrees by producing research publications or Intellectual property or a software/ hardware product.

#### 4.2 Post Graduate

IIIT Sri City offers two-year specialized MTech degree programmes in: i) Artificial Intelligence & Machine Learning (AI & ML), and ii) Cyber Security (CS).

#### 4.2.1 MTech in AI & ML

Recognizing the growing importance of Artificial Intelligence & Machine Learning, the institute senate comprising of leading visionaries in the field of Information Technology namely Prof. C.V. Jawahar, Professor, IIT Hyderabad; Prof. Devendra Jalihal, Professor, IIT Madras, Prof. M. Balakrishnan, Professor, IIT Delhi, Prof. S. Sudarshan, Professor, IIT Bombay, Dr. Gargi B Dasgupta, Director, IBM, Mr. Kannan Babu Ramia, Principal Engineer, Intel, and Mr Srikumar Sreedharan, Product Head, TCS have structured and approved an industry-tailored two year M.Tech programme in Artificial Intelligence & Machine Learning, with emphasis on outcome-oriented curriculum.

The first semester of the programme offers foundational courses such as Machine Learning, Artificial Intelligence and Knowledge Representation, Advanced Data Structures and Algorithms, Mathematical Foundations, and AI & Ethics. The students will be individually mentored by faculties from the first semester onwards and will be encouraged to take up either industrial internships or to work on sponsored research projects with the institute faculties. The second semester of the programme offers two core courses of Deep Learning and Data Analytics & Visualization. Additionally, many electives are also being offered to facilitate deep understanding and research in the allied areas of AI & ML such as Computer Vision, Natural Language Processing, Information Retrieval, Data Mining, Robotics, Probabilistic Graphical Models, Big Data Analytics, Reinforcement Learning, and Advanced Optimization. The students are encouraged to take up year-long industrial projects during the last two semesters of the programme facilitating industry connect and effective orientation to industry practices.

#### MTech AI & ML Curriculum

The curriculum of the MTech Programme covers a total of 64 credits, necessary for completing graduation requirements. The total number of 64 credits is divided into two parts: a) course work

that spans over the first two semesters requires the completion of 40 credits and b) the industry – based project work requires the completion of 24 credits that lead to MTech Dissertation. Semester 1 Semester 2

- 1. Artificial Intelligence and Knowledge Representation
- 2. Machine Learning
- 3. Advanced Data Structures and Algorithms
- 4. Mathematical Foundations
- 5. AI and Ethics (Seminar Course)

#### **Electives:**

- 6. Computer Vision
- 7. Natural Language Processing
- 8. Information Retrieval
- 9. Data Mining
- 10. Robotics
- 11. Probabilistic Graphical Models
- 12. Big Data Analytics
- 13. Reinforcement Learning
- 14. Advanced Optimization

#### MTech AI & ML's Senate & Programme Advisory Group

The Senate of IIIT Sri City has senior academicians from institutes like IIIT Hyderabad, IIT Madras, IIT Bombay, IIT Delhi etc. and industry experts from leading organizations such IBM, Intel, TCS etc. For Senate details visit http://www.iiits.ac.in/home/governance/senate/

Programme Advisory Group (PAG) helps the institute formulate the curriculum and support effective delivery of the programme. The PAG of MTech AI & ML consists of the following experts:

- 1. Prof. Balaraman Ravindran Professor & Head, The Robert Bosch Centre for Data Science and AI, IITM
- 2. Dr. Manish Gupta Director Google Research

- 3. Ms. Shalini Kapoor IBM Fellow & CTO for AI **IBM** Research
- 4. Dr. Venkatesh Sarangan **Principal Scientist** Tata Consultancy Services

#### **4.2.2 MTech in Cyber Security**

The recent advancement of information sharing over the Internet increases cyber threats to the organizations. It requires security related sophisticated knowledge and tools to keep the systems secure from external threats. Around the world as well as in India, there is a high demand for skilled cyber security professionals who are well educated about the various aspects of cyber security. Taking motivation from this, IIIT Sri City offers a two-year M.Tech degree programme specialised in Cyber Security with emphasis on Outcome Based Education (OBE). The programme advisory group constitutes cyber security experts working at reputed organizations/universities such as Ernst & Young, IBM, KPMG, TCS, City University of London, and Data Security Council of India (DSCI). The advisory group ensures timely revision of the curriculum to ensure industry relevance and graduate employability.

- 1. Deep Learning
- 2. Data Analytics and Visualization
- 3. Elective-1
- 4. Elective-2
- 5. Elective-3

Being an Institute of National Importance in Information Technology, IIIT Sri City is already running the B.Tech. program with Cyber Security specialization. Thus, the M.Tech.in Cyber Security program will boost the IIITS ecosystem further and will produce highly skilled manpower to the industry.

#### **MTech Cyber Security Curriculum**

The curriculum of the MTech Programme covers a total of 64 credits, necessary for completing graduation requirements. The total number of 64 credits is divided into two parts: a) course work that spans over the first two semesters requires the completion of 40 credits and b) the industry –based project work requires the completion of 24 credits that lead to MTech Dissertation.

#### Semester 1

- 1. Introduction to Cyber Security
- 2. Algorithms and Complexity Analysis
- 3. Network and Data Security
- 4. Software Security
- 5. Cyber Security Regulations (Seminar Course)

#### **Electives:**

- 1. Threat Intelligence
- 2. Malware Analysis and Digital Forensics
- 3. Cyber Physical Systems Security
- 4. Software Defined Networking Security
- 5. Mobile and Wireless Security
- 6. Blockchain Technology

#### MTech Cyber Security Senate & Programme Advisory Group

The Senate of IIIT Sri City has senior academicians from institutes like IIIT Hyderabad, IIT Madras, IIT Bombay, IIT Delhi etc. and industry experts from leading organizations such IBM, Intel, TCS etc. For Senate details visit <u>http://www.iiits.ac.in/home/governance/senate/</u>

Programme Advisory Group (PAG) helps the institute formulate the curriculum and support effective delivery of the programme. The PAG of MTech Cyber Security consists of the following experts:

- Mr. V. Anand Kumar Director, Managed Security Services, IBM
- 2. Prof. Muttukrishnan Rajarajan Director, Institute for Cyber Security, City University of London
- 3. Dr. Rajeev Mukundan CTO Cyber Security, TCS
- Mr. Sastry Krishna Pendyala Partner, Ernst & Young, Hyderabad

#### Semester 2

- 1. Cryptography
- 2. Machine Learning Applications for Cyber Security
- 3. Elective 1
- 4. Elective 2
- 5. Elective 3

- Mr. Akhilesh Tuteja Global Cyber Security Practice Co-leader, Partner KPMG
- 6. Mr. Vinayak Godse Vice President, Data Security Council of India (DSCI)

#### 4.3 PhD

IIITS has significant focus on research demonstrated through sponsored projects and scholarly publications. IIITS envisions to be a globally known institution for IT education, research and development. The institute has special thrust to attract and retain talented faculty members who can make a mark in teaching and research at the international level. The current faculty members at IIITS are from leading universities from India and abroad with excellent teaching and research credentials. The institute offers the following Ph.D. programmes that focus on all areas of computing:

- PhD in Computer Science and Engineering
- PhD in Electronics and Communication Engineering
- PhD in Mathematics & Data Science

The Institute has started a Part-Time PhD programme for personnel from industry and Government of India Research labs such as DRDO, ISRO etc. from Monsoon (July) 2019 onwards.

#### **PhD** Curriculum

**Duration of the programme:** The maximum period to complete the programme is 6 years for full-time candidates and 7 years for Part-time candidates. Scholarship will be given up to 4 years for full-time candidates or till the date of thesis submission whichever is earlier.

**Doctoral Committee:** Every DC committee includes the following composition of members - Chairman, Research Guide, Co-Guide (if any), Internal member (CSE), Internal member (ECE), Industry co-guide / Industry member, External member from Industry / Research establishment.

**Course work:** The research scholars should complete four relevant courses prescribed by the Doctoral committee.

**Industry Internship:** The PhD students under full-time category are encouraged to take up industry internships in top-tier MNCs and Research organizations for a duration of 4-6 months during the entire PhD programme.

#### **Programme highlights:**

- Industry-oriented PhD Programme
- Opportunity to do summer internship in industries
- Funded PhD programme for full-time students
- Flexible attendance scheme for part-time PhD students
- No campus stay requirement for completion of course for part-time students
- Inclusion of Industry expert in doctoral committee
- Support to attend conferences within India

#### **4.4 Academic Performance**

Semester	Subjects	No. of students enrolled	No. of students passed	Pass percentage
Monsoon 2022	UG 1 Courses Discrete Structures and Matrix Algebra Computer Programming Digital Logic Design Overview of Computers Workshop Essential English Energy and Environment UG 2 Courses	UG 1 - 324	299	91.7%
	Object Oriented Programming Mathematics-3 Advanced Data Structures and Algorithms Database Management Systems Computer Architecture Circuits and Network Analysis Control Systems Embedded Systems Professional Communication	UG2 - 324	297	91.7%
	UG3 Courses Framework Driven Front-End Development Cloud Computing Distributed Computing Introduction to Cyber Security Graph Theory and Application Natural Language Processing Machine Learning Information Retrieval Data Mining Computer Graphics and Multimedia	UG 3 - 294	232	78.9%
	Introduction to VLSI Digital Signal Processing Pattern Recognition Wireless Communication Microprocessors and Microcontrollers Electronic Packaging Internet of Things Introduction to Data Analytics Quantitative and Reasoning Aptitude Foundations in Human Values and Ethics			

	1			
	Organizational Behaviour			
	Climate Change and its Implications			
	UG4 Courses			
	Bioinformatics			
	Virtual and Augmented Reality			
	Computing for Internet of Things			
	Digital System Design			
	Microwave Engineering and Radar Systems			
	Introduction to Data Analytics			
	Cryptography			
	Digital Image Processing	UG4 - 259	237	91.5%
	Introduction to Cyber Physical System			
	Big Data Analytics			
	Soft Computing & Evolutionary AI			
	Skills for Employability			
	Personal Growth Programme			
	IT Project Management			
	Innovation and Entrepreneurship			
	ICT for Development			
Spring 2023	UG 1 Courses	UG 1 - 319	279	87.4%
	Probability and Statistics			
	Data Structures and Algorithms			
	Signals and Systems			
	Computer Architecture			
	Basic Electronic Circuits			
	Operational Communication			
	Foundations in Human Values and Ethics			
	Energy and Environment			
	Energy and Environment			
	UG 2 Courses	UG2 - 321	289	90.03%
	Computer and Communication Networks			
	-			
	Fundamentals of Full Stack Development			
	Artificial Intelligence			
	Theory of Computation			
	Fundamentals of Communication			
	Electromagnetics and Transmission Lines			
	Analog Circuits			
	Advanced Communication Skills			
	Quantum Information and Computing			
	Organizational Behavior			
	Innovation and Entrepreneurship			

	Personal Growth Programme			
	UG 3 Courses			
	Webservices and Backend Development	UG3 - 292	282	96.6%
	Distributed Computing	UG3 - 292	282	90.0%
	High Performance Computing			
	Computer Vision			
	Multimedia Systems			
	Cognitive Computing			
	Graph Theory and Applications			
	Robotic Intelligence			
	Bioinformatics			
	Data Mining			
	Opto Nano Electronics			
	Micro Sensor and Actuators			
	Model based Signal Analysis			
	Advanced VLSI			
	Power Electronics			
	Hardware Description language			
	Brain Computer Interaction			
	Geospatial Technologies and applications			
	Wireless Networks			
	Smart Manufacturing			
	Advanced data Analytics			
	Python for Data Science			
	Deep Learning			
	Intelligent and Autonomous Systems			
	Skills for Employability			
	Personal Growth Programme			
	Quantum Information and Computing			
	Organizational Behavior			
	Innovation and Entrepreneurship			
	ICT for Development			
	UG 4 Courses	UG4 - 259	254	98.06%
		064 - 239	234	70.00%
	Artificial Neural Networks			
	Artificial Neural Networks			
	Information Theory and coding			
	Software Defined Networks			
	Macro Economics and Personal Finance			
L				

### **5.** Placements and Internships (Summer internship and semester long projects)

#### **5.1 Summer Internships**

Students at IIIT Sri City are highly encouraged to seek internships during summer irrespective of which year they are enrolled in the institute.

While it may sound quite aspirational that we are encouraging even the UG first year students to seek internships, we believe that an industry experience (from the first year) will go a long way in helping a student launch a bright career, from our institute. So, we encourage students as soon as they join to even get work-from-home internships. We feel that every single aspect of learning should be implemented rigorously and executed with due diligence. Internships are one such milestone at the IIITS.

Of course, our focus is to get the pre-final year students to get summer internships, as there is a good chance that these internships can get converted to Pre-Placement Offers (PPO). The Placement Office take significant effort to get internships to students and does the following:

- Contact companies routinely to see internship opportunities for pre-final year students,
- Share various contests that are happening domestically in the country and internationally,
- Seek companies for projects so that students can complete the projects at home and add it to their resume, and
- Expose students to various international internships opportunities.
- Students are also encouraged to take academic internship opportunities both here in India and abroad. The placement office also brings such opportunities to students so that they can apply for many opportunities.

Microsoft, Amazon, Yahoo, Swiggy, ZS Associates, Bosch, Commvault are few of them where our students are currently indulged in their high-end lead projects.

#### **5.2 Semester Long Project**

Semester-long projects is one of the flagship programs of our institute and we have brought in novel aspects into this program so that it benefits the students. There are at least two ways that students benefit from these projects:

- 1. Students who aspire for their dream jobs sign-up with companies for a Semester-long projects program with an opportunity to convert into a full-time position.
- 2. Often the companies visiting the campus for recruitment also offer students an opportunity to join as interns before the students join in the full-time positions in the same company. So, students have a gradual transition from student to their full-time roles.

The students get eight credits for these projects, and we have a rigorous review. The students who had opted for a Semester-long project only, will be evaluated twice by the industry mentor and twice by the institute faculty mentor. A team of two faculty members carry out the final evaluation, which includes the internal faculty mentor.

Number of Students Doing SLP	169	
Duration of Internship	4 to 6 months	
Stipend for the Internship	Rs. 25000 to Rs. 1, 20, 000	

Following are some of the key numbers for the Semester-long projects in the year 2023:

#### **5.3 Campus Placement:**

The BTech placements have significantly improved over the previous years through a structured and systematic effort. The campus placement started in the first week of August 2022 and the companies that visited the campus for recruitment not only hired both the CSE and ECE students. The job roles that students get are very exciting to them in that it fosters their career growth. The highest domestic package that our students received in the academic year 2022-23 was Rs. 1.20 Crore per annum. We have achieved 93% placement for the 2023 batch. IIITS attracts product-oriented companies mostly and the diversity of the companies that come for placements cater to the needs of the students. MNCs (Microsoft, Amazon, Reliance, American Express, BNY Mellon, etc.), service-oriented companies (but hiring for product role positions such as TCS, IBM, Virtusa, L&T, etc.) and established start-ups (SpringML, Flutura, Couture etc.) have recruited our students.

- The *number of companies* visiting the campus is more than required for the number of students eligible in a given year. So, it gives students a choice to sit in companies of their interest. Students also get exposure to various companies that are ready for recruitment in the market.
- The Cost to the Company (CTC) package that IIITS gets for campus placements is on par with any premium institute in the country. The job roles that students get are very interesting to them in that it fosters their career growth.
- The highest domestic package that an IIITS student receives in the academic year 2022-2023 is 1.20 Crore per annum.
- Our students have been recruited in several deep-tech startups such as DarwinBox, Tekion, MerkleScience,Limechat etc..

#### **Student Readiness for Placements**

- The institute offers *specializations for undergraduate students* in areas such as AI & ML, Cyber Security, Cyber-Physical Systems, and with more specialization areas in the coming years. In addition, our students have expertise in other areas such as Software Development Engineering, Computer Vision, Data Analytics, IoT, Wireless Communication, Smart Transportation, and others.
- Before the companies visit the campus for placements, students polish their soft skills with courses such as *Aptitude and Reasoning, Advanced Communications Skills, and Competitive Programming.* It is worth mentioning that Communication Skills is being taught as a set of four courses in the first two years to bring students to the required levels in reading, writing, listening, and speaking.
- We also place an emphasis on developing graduates with specialized competencies and skills to take up *pivotal roles in Startups*. In addition to preparing the students for various job sectors, IIITS curriculum also caters to students who are inclined towards starting their own companies with courses such as Entrepreneurs and Startups and Small Business Management; students also understand the environment in startups (apart from learning how to build their own). Further, to support innovative startups from students, IIITS has launched the *Technology Business Incubator*

with initial funding from the Ministry of Electronics and Information Technology (MeitY), named Gyan Circle Ventures.

- Importantly, our students have secured *semester-long industry internships and jobs* in *several MNCs* including Microsoft, Amazon, Cisco, American Express, Bank of New York, IBM, National Instruments, etc.
- Our student's other achievements include:
  - > Won Microsoft AI challenge, Google Android Hackathon;
  - Runner ups at Smart India Hackathon;
  - > Top 10 in Amdocs Hackathon; and
  - Selected (six students) in Google Summer of Code (GSoC).

#### **Institute Preparedness for Placements**

- IIITS also *engages with industry* for their research and the institute routinely brings faculty from the industry for teaching industry-oriented courses. The institute conducts many workshops in a given year partnering with industry professionals. These activities further strengthen the industry-institute relationship and the institute benefits in terms of placing the students in those companies that the institute is tied with.
- At IIITS, a structured and systematic effort for placements and training is present with a group of faculty members, staff, and students under the leadership of the Director. Placements is one of the *priority areas of the institute* and required resources in terms of manpower, etc. are sufficiently allocated. For example, there are placement chairs, training and placement officers, and student placements coordinators.

#### **Companies Visiting IIITS**

- The Campus Placement started in the first week of August 2022 and the companies that visited the campus for recruitment not only hired both the CSE and ECE batch students but the companies were also from varied categories: multinational companies, successful startups, cutting-edge technologies computer science companies, and core ECE companies. Some of our multinational recruiters represented industries ranging across Consulting, E-Commerce, Hi-Tech, Hospitality, and Health Care.
- IIITS attracts product-oriented companies mostly and the diversity of the companies that come for placements cater to the needs of the students. Big MNCs, Big service-oriented companies (but hiring for product role positions), established start-ups, promising startups in recent years, core companies (for ECE branches), etc., are the categories of the companies that visited IIITS in recent years.

#### 6. Students Development Activities (SDC):

#### 6.1 Social Activities: NSS and UBA Activities

#### a) Swachatha Pakhwada (14th Sept. to 02 Oct. 2022):

India is set to impose a nation-wide ban on single-use plastic (including plastic bags, straws, cups, plates, small bottles and certain types of sachets) on October 2, 2022, on the occasion of the 150th birth anniversary of Mahatma Gandhi. India generates about 9.4 million tonnes of plastic waste each year and with no effective disposal method, the plastic waste ends up the roadsides, in landfills and water bodies. To make IIITS campus plastic free, a special plastic free cleanliness drive was carried out on occasion of Gandhi Jayanti (02/10/2022). NSS volunteers of first year and second year of IIITS were actively participated in the cleanliness drive. They visited various places in campus and make them plastic waste free by collecting plastics garbage and other plastic products. They also aware the campus peoples to avoid single use plastic in his day to day life.



#### 6.1. b) World Blood Donor Day 14th June 2022:

A Blood donation camp was organized by IIIT Sri City, on the occasion of World Blood Donor Day on 14th June 2022. The theme of the camp for this year was **"Donating blood is an act of solidarity. Join the efforts and save lives".** Several companies operating in Sri City were invited.

Many students and staff members of the college actively volunteered to help the donors and many even donated blood. The major companies that took part in the camp were Axxelent Pharma, ASIAN, IMOP, Alstom and the other companies which turned up were Prolix, Novaair Technologies, Toray industries, CCAL, AAI, Pepsi Co., Brakes India TVS and Asian Auto Parts. There were more than 138 donors.



The blood donation campaign was an immense success and the result of the selfless support of Sri City, UG1 Council, NSS volunteers and the faculty and Staff. The blood collected was taken by the Area Hospital, Gudur, Tirupati District.

#### 6.1. c) World Environmental Day, 5th June 2022:

To mark the importance of 'Mother Nature', the World Environment Day is celebrated each year on June 5 to spread awareness regarding the protection and nurturing of the environment to make Earth a better place to live. As per the letter F. No 10-28/2021-AR from the Government of India, Ministry of Education Department of Higher Education. It has been instructed to organise events on the occasion of World Environment Day on 5th June 2022. As per the instructions NSS IIIT Sri City cell has planned and organised the following activities.

- Online promotion of the theme 2022 "Only One Earth" in social media.
- Selfie contest
- Taking Pledge for keeping green and clean environment.
- Cleaning the Campus
- Displaying painting in the campus
- Village campaign









#### 6.1 d) UBA Free Medical and Wellness Camp:

IIIT Sri City Chittoor under the scheme of Unnath Bharath Abhiyan (UBA) 2.0 has conducted a free medical camp on 26/11/2022 in one of the adopted villages (Sidhamma Agraharam) in association with Kauvery Hospital. The aim of the programme was to provide the poor population with overall physical examinations which include health check-ups, BP, sugar and cholesterol etc. So this medical camp provided free medical advice, and medicine to unfortunate people and refer them for specialized treatment whenever it is required. The camp was set up from morning 09:30 am to 01:00 pm. Bus facility was arranged for other adopted villages (Arroor and Mallavariplem East) population to come to the venue and return back to their respective village. From Kauvery hospital, three doctors along with 6 medical staff were present during the camp. The camp was coordinated by the student Volunteers of IIIT Sri City. Prof. G Kannabiran, Director of IIIT Sri City visited the medical camp, spoke to the villager and was honoured with mementoes to doctors, nurses and village school primary teachers for their contribution and service during the camp. The Director also appreciated the student volunteers and staff of IIIT Sri City for the smooth conduct of the camp. A total of 138 villagers benefited from the help of the camp.



#### 6.1 e) National Unity Day 2022:

Every year, October 31 is marked as National Unity Day or Rashtriya observe Sardar Ekta Diwas in India to Vallabhbhai Patel's birth anniversary. Sardar Patel was popularly called the Iron Man of India. He contributed immensely to India's freedom movement and political integration after the country gained independence from British rule in 1947. IIIT Sri City had executed following events on Rastriya Ekta Diwas to make the day memorable: Village rallies to spread the awareness of Unity Day, Exibition of Life history of Sardar Vallabhhai Patel and Unity Pledge.



#### 6.1 f) Mathribasha Diwas 2023 :

International Mother Language Day 2023 is celebrated every year on February 21 to promote linguistic and cultural diversity and multilingualism around the world. In India, the day is observed as Matribhasha Diwas. On this occasion IIIT Sri City has planned following events to be conducted for all the students.

Events:

- 1. 90 sec. elocution competition.
- 2. Ethnicity of your mother language (in their own language)- competition
- 3. Singing Folk songs in regional Language competition
- 4. General Quiz
- 5. Poster and Slogan competition (Charts and Color will be provided)



#### 6.1 g) Independence Day and Republic Day Celebration:

Independence Day and Republic Day are two of the most significant days in the history of India and celebrated across the country with great enthusiasm. IIIT Sri City has organised various cultural events on these days to make the celebration memorable.



#### 6.2. a) International Day of Yoga, 21st June 2022 :

IIIT Sri City was one of the 75 iconic institute selected by the Department of Higher Education, Ministry of Education, Govt. of India. The Institute has organised 7 days yoga camp for all the students and Sri City community. Village Campaign is done to spread awareness of yoga in UBA villages and the students and youth of villages are invited to take part in the mass demonstration on the day of IDY. Live telecast of Prime Minister Modi was telecasted from palace city Mysuru before the demonstration. Addressing the main event of the eighth edition of the International Day of Yoga in the heritage city of Mysuru in Karnataka, PM Modi said, "I extend my greetings to all on this 8th International Yoga Day. Today, Yoga is being practised in all parts of the world. Yoga brings peace for us. The peace from Yoga is not only for individuals, it brings peace to our nations and the world." He said that yoga is not only for any individual but for the entire humanity. "Yoga is not only for any individual but for the entire humanity. This is the reason that the theme of International Yoga Day is 'Yoga for humanity'," said PM Modi. "This whole universe starts from our own body and soul. The universe starts from us. And, Yoga makes us conscious of everything within us and builds a sense of awareness," he said. After the PM's speech the common yoga protocol was followed with the Yoga experts of "Art of Living". Nearly 500 participants has practiced and performed Common Yoga Protocol along with the experts. Prof G Kannabiran, Director, IIIT Sri City awarded certificates to the winners of Surya Namskara 108 challenge conducted during 7 days Yoga camp. The International Yoga Day 2022 was concluded with national anthem.



A healthy body houses a healthy mind. The students will be given an ample opportunity to exhibit their inherent talent, exuberant skills and charismatic leadership qualities. In this context all the students are divided into four teams called ,Astra , Chakra, Trishul and Vajra, the competitions will be conducted in the following Team Games / Events between the teams on a Knock-Out Basis to decide the Winners and Runner Up in each tournament/event: The Tournament conducted on 2nd to 4th April 2022.

- 1) Basketball
- 2) Volleyball
- 3) Football
- 4) Cricket
- 5) Throw ball
- 6) Chess

A total of 200 IIITS students have participated in the Sports Feat. The medals and trophies were presented to all the winners and runners by Prof. G Kannabiran, Director, IIIT Sri City Chittoor.



#### 6.2 c) National Integration Marathon 2023:

IIIT Sri City in Collaboration with Sri City Foundation and Krea University hosted a 5K run on Sunday, 12th Feb. 2023 to promote fitness and healthy living among the student, staff and working community in the Sri City. The event started at 6:30 am with over 1000 participants taking part in the run. The participants included students, faculty members, and staff members of IIIT Sri City, Krea University and Employees of various companies in Sri City. The runners were of different ages and abilities, including beginners and experienced runners. The 5K run was not a competitive event, but rather a community-building event. The runners cheered each other on and encouraged those who were struggling. The event was a testament to the spirit of teamwork and community at IIIT Sri City.



**6.2 d) 5th Inter IIIT Sports Meet 2023:** The 5th Inter IIIT Sports meet was held at the Indian Institute of Information Technology Design and Manufacturing (IIITDM) Kanchipuram in Tamil Nadu. The event was a four-day affair that brought together various IIIT campuses from across the country. The games included athletics, football, basketball, badminton, cricket, table tennis, volleyball, and chess. The participants from different IIITs showcased their skills and abilities in the different games. The main objective of the sports meet was to promote sports and games, healthy competition, and foster unity among the different IIITs. The atmosphere was vibrant and energetic with participants cheering for their teams and competing with great sportsmanship. The games were intense, and the players displayed great teamwork, focus, and skill. IIIT Sri City has bagged 44 medals including 3 gold medals in power lifting and championship trophies in Cricket and Throw ball women. Football men team also bagged silver medal in the meet.



Fit India Movement is a nationwide movement in India to encourage people to remain healthy and fit by including physical activities and sports in their daily lives. Fit India Movement was launched by the Prime minister of India Shri. Narendra Modi at Indira Gandhi Stadium in New Delhi on 29 August 2019. IIIT Sri City Chittoor to promote Health and fitness through sports and to calculate holistic development among students has organised the "Fit India Campaign" in the IIITS Campus. During the campaign following games were conducted:-

- 1) Basketball
- 2) Volleyball
- 3) Football
- 4) Cricket
- 5) Throw ball
- 6) Chess



Sports Achievement in 5th Inter Sports Meet, IIITDM Kancheepuram

#### Medals Won

- 1. Gold Medal Cricket, Throw ball Women and Powerlifting Men and Women
- 2. Silver Medal Football Men
- 3. Bronze : Powerlifting men women
- 4. 4th Position : Volleyball Men and Chess

Total Medals Won: 44



# 6.3 Technical club activities:6.3.1 IOTA (Projects Club of IOTA)6.3.1. a) Introductory Session (28/09/2022)

IOTA had conducted their first session to introduce the club to the UG2. We had a healthy discussion about different realms of development. Our UG3 team introduced several domains of development to those who attended. Each domain was picked by a member of the club who were highly experienced in the field and had done internships in that domain. The students really liked the session and also showed interest in joining the club to help the club achieve it's goals.





#### 6.3.1. b) Typing Contest (18/11/2022)

As a part of Techo Cultural Fest **Urkrishta**, we organized 4 events, **Typing Contest** being one of them. It was a highly engaging event that aimed to improve participants' **typing skills** while promoting healthy competition. The contest provided a platform for students to showcase their speed and accuracy in keyboard typing. Participants were challenged with various typing exercises and were evaluated based on their **speed**, **accuracy**, **and efficiency**. The Typing Contest not only enhanced participants' typing abilities but also fostered a fun and competitive atmosphere, encouraging students to strive for improvement in this essential skill for academic and professional success. This event attracted over **60 students**.



#### 6.3.1. c) CSS Battle (17/11/2022)

As a part of Techo Cultural Fest **Urkrishta**, we organized 4 events, **CSS Battles** being one of them. It brought together talented students who showcased their **CSS coding skills** through competitive challenges, pushing the boundaries of web design. Participants demonstrated innovative design, problem-solving abilities, and effective collaboration. CSS Battles involved designing puzzles using CSS. The puzzles were built in an increased order of difficulty. Our Team had developed a platform to track the percentages of all users. The user with the **most rate** matching to the guestions of the problem of the superior o

matching to the questions wins. This event attracted over 80 students.





#### 6.3.1. d) Synergy: Stumble Guys (19/11/2022)

As a part of Techo Cultural Fest **Urkrishta**, we organised 4 events, **Synergy: Stumble Guys** being one of them. While Valorant was a core game, Stumble Guys was aimed at a less gamer audience. It is a fun 5 min game that anyone could install and play. It involved 50 people joining a lobby and tackling obstacles to win. We had over **150 participants** coming in and participate. This was organised right after technical events of Gradient where the participants came to relieve the stress of the technical events and at the same time had a lot of fun with their friends.





#### 6.3.1. e) Synergy: Valorant (20/11/2022)

As a part of Techo Cultural Fest Urkrishta, we organised 4 events, Synergy: Valorant being one of them. Valorant is 5v5 first person shooter games. It is one of the most famous game in the world gaining viewership of billions in their global tournaments. Amidst all the technical events a series of fun events had to be organised. The participants enjoyed these 1 day events after working hard in technical events. Participants showcased their strategic thinking, teamwork, and individual skills in a competitive gaming environment. The event provided an opportunity for students to bond over their shared love for gaming, fostering a sense of community and camaraderie.



#### 6.3.1. f). Global Game Jam Titans (03/02/2023)

Under the esteemed guidance of Professor Himangshu Sarma, we had the privilege of hosting the most grand event of our club, **Global Game Titans**. As a local Jam Site for the renowned Global Game Jam, this event brought together gaming enthusiasts from our college and beyond. The participants were immersed in an environment of **creativity**, **collaboration**, **and innovation**. With the generous support of **sponsors** such as **Tata Sampann Foods**, **Lavazza Coffee**, **and PepsiCo**, we provided a platform for teams to showcase their game development skills and create captivating experiences within a limited time frame. Professor Himangshu Sarma's invaluable guidance and expertise ensured the smooth execution of the event, allowing participants to explore their passion for game development and fostering a sense of community within our college.



The event witnessed teams of **passionate game developers**, **designers**, **and artists** coming together to **ideate**, **prototype**, **and develop innovative games**. Global Game Titans fostered a sense of community, allowing participants to connect with like-minded individuals and industry professionals. We are grateful for our sponsors' support in making this event a resounding success and promoting the spirit of innovation and collaboration in our college community.



#### 6.3.1. g)Web Developer Bootcamp for UG1 (Feb 06-13, 2023)

We also successfully organized a comprehensive "Web Developer Bootcamp," a 5-day session packed with extensive web development knowledge. The event was designed to equip participants with essential skills and knowledge required to excel in the field of web development. On Day 1, participants explored career opportunities in web development and received an introduction to HTML, CSS basics, and development tools. Day 2 delved deeper into CSS, providing participants with an extensive understanding of styling techniques, layouts, and responsive design. Over 100 UG1 Students attended this session.



**Day 3** focused on **JavaScript fundamentals**, covering topics such as variables, functions, and basic programming concepts. **Day 4** introduced advanced JavaScript topics, including **asynchronous calls and the Document Object Model (DOM)**. Participants delved into the intricacies of working with APIs and implementing interactive features on web pages.

Finally, **Day 5** centered around version control using **Git and GitHub**. Participants learned how to set up repositories, track changes, and collaborate with others effectively. **All sessions were followed by a fun** 

quiz about the session which the students enjoyed a lot. They also solved assignments given by our team and built their porfolio as a result of this bootcamp.



#### 6.3.1. h) Introductory Session to UG1 (07/02/2023)

IOTA had conducted their first session to introduce the club to the UG1. We had a healthy discussion about different **realms of development**. We decided to let the **UG2 take** over this session as they will later have the experience of handling the club later in future. Our UG2 team introduced several domains of development to those who attended. Each domain was picked by a member of the club who were highly experienced in the field and had done internships in that domain. The students really liked the session and also showed interest in joining the club to help the club achieve its goals.



#### 6.3.1. i) HackFrenzy (07/03/2023 - 09/03/2023) (Offline Phase)

A National level hackathon sponsored by Sonata Software organised in collaboration with GDSC as a part of our esteemed techo cultural fest Abhisarga which attracted over 400 students and 151 teams across India. Final 18 team were invited to participate and join us at the offline round of the contest. Students from all over India joined us for the offline round where the problem statement was "Agriculture Management" set by our esteemed faculty mentors.



### 6.3.2. MATRIX (DATA SCIENCE CLUB):6.3.2.a). Introductory Session(27th Jan 2023):

Conducted an introductory session regarding the club for UG-1 students. We discussed the importance of the club, and how data science in the present time is essential. Then we briefly gave an overview of the technology stacks used, and how useful they are in the field of data science, shared different career opportunities available, and presented a comprehensive road map for aspiring students. We emphasized that the club can serve as a supportive community where everyone can learn from each other and grow together. We encouraged students to actively participate in club activities, workshops, and events. In the end, we had a Q&A session where students had the opportunity to seek clarification on various topics.



6.3.2.b). Analytics Arena Hackathon(7th April 2023-9th April 2023):

Matrix club organized a data science hackathon(Analytics Arena) as part of IIITS techno-cultural fest -Abhisarga, where students from different colleges all over India participated in the event. We conducted the 1st two rounds online, each being elimination rounds. Those who outperformed both rounds were gathered at our college for a 48hr long hackathon. The problem statement was decided by an industry person. utilized programming, Participants machine



learning, and data visualization skills to analyze the dataset and develop predictive models. In the end, teams presented their solutions to a panel of judges. All teams actively participated in the hackathon.



#### 6.3.2.c). Data Science Quiz(9th April 2023):

As part of IIIT fest-Abhisarga, Matrix club conducted the data science quiz for all students participating in the fest and our college students. The quiz session created an atmosphere of healthy competition, allowing students to showcase their understanding of various data science concepts and techniques. The questions were designed to challenge the participant's knowledge and critical thinking skills, ranging from basic concepts to more advanced principles. The event concluded with an announcement of the top-performing teams or individuals who achieved the highest scores.



#### 6.3.3 Google Developer Student Club (GDSC) Club:

**GDSC IIIT Sri City** is a non-profit developer group powered by **Google Developers** to learn, share, connect and develop skills. We are committed to learn and grow by sharing knowledge among peers and elsewhere in order to build better individuals out of every student associated with us.

We intend to do that with the help of multiple events and activities for the students that range from boot camps to games and webinars to meetups. We also align ourselves with Google Developer Student Club's aim of providing technical solutions to local businesses and augment the understanding of technology - budding or old - to whoever we can reach. **Event types conducted:** 

- **Speaker Sessions** Speaker sessions hosted by GDSC Core Team, where we teach and discuss various technologies and frameworks.
- **Guest Speaker Sessions** External speakers host these event types. They could be seniors or imminent people from the industry.
- Campaign events A series of events intended towards teaching a single domain.

#### Hackathons and Coding Contests

We conducted 3 Hackathons and 1 Coding Contest in the Academic Session 2022-23. -Dev-a-thon 2.0 [*Hackathon*]

- HackFrenzy [Hackathon]
- Filecoin Orbit India Hackathon IIIT Sri City [Hackathon]
- CodeRush 2023 [Coding Contest]

#### 6.3.3.a). Compose Camp | Day 01 | Sept 30, 2022

- Speaker Session + Campaign Event (Campaign Name: Compose Camp)
- The first unit of the Android App Development with Kotlin course in this Introductory session of The Compose Camp.
- Total Attendees: 66





6.3.3.b). Speaker Session in collaboration with COMETLABS | Oct 06, 2022

• We hosted **Mr. Prashant Katiyar**, **Founder & CEO of COMET LABS & Founder, IIITians Network** for a speaker session about Product Development, Developer Tools, and Hiring Processes in Tech Startups.



• Total Attendees: 85

#### 6.3.3.c). Compose Camp | Day 02 | Oct 07, 2022

- Speaker Session + Campaign Event (Campaign Name: Compose Camp)
- This event focused on the basics of **Kotlin** and **Jetpack Compose**. Students were introduced to using Kotlin in Industry setting and how Jetpack Compose could make a significant improvement in performance and agile development compared to traditional App Development.
- Total Attendees: 48



#### 6.3.3.d). Compose Camp | Day 03 | Oct 12, 2022

- Speaker Session + Campaign Event (Campaign Name: Compose Camp)
- This event focused on the setting up of **Android Studio** and exploring the **Android Emulator**. Also was discussed more about **Kotlin** and its active use in the industry.
- Total Attendees: 32



#### 6.3.3.e). Compose Camp | Day 04 | Oct 14, 2022

- Speaker Session + Campaign Event (Campaign Name: Compose Camp)
- This session concluded the **Compose Camp Event Series** and we shared with the participants more info into how they can continue their **Android Journey** and we

invited them to raise any doubts they had which we could solve.

• Total Attendees: 17



#### 6.3.3.f). GDSC Orientation and Guidance Session | Jan 20, 2023

Speaker Session : **Orientation and Guidance Session** for the freshers batch (**Batch of 2026**). This session was designed to provide important information about the **GDSC program**, as well as to answer any questions about the program.

We provided important information about the Club, including an overview of the Club activities, **opportunities for collaboration** and **learning new things**, along with support services available to students. Also included was a **Q&A session** at the end for students to ask doubts they had.

Our UG3 team (**Domain Leads**) introduced several domains of development to those who attended. Each domain was picked by a member of the club who were highly experienced in the field and had done internships in that domain.

Total Attendees: 124



#### 6.3.3.g). Get Started with Solution Challenge | Jan 27, 2023

- Speaker Session
- A session which outlined the details, rules and regulations of Google's Annual Solution Challenge (an International Hackathon), based on the United Nations' 17 Sustainable Development Goals.
- Total Attendees: 47

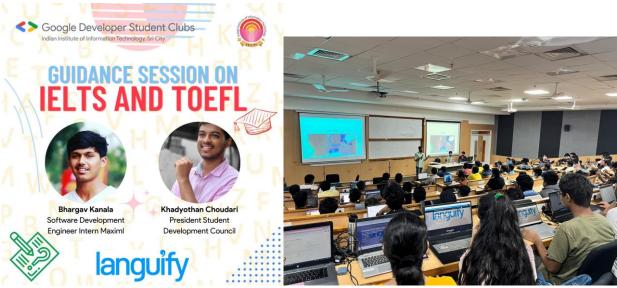


#### 6.3.3.h). Preparing IELTS & TOEFL | Feb 08, 2023

Guest Speaker Session for Foreign Studies

In the speaker session focused on preparing for the IELTS and TOEFL exams, attendees were guided through the essential steps to kickstart their preparation for these two crucial exams for students interested in foreign studies. The discussion began by highlighting the significance of IELTS and TOEFL in assessing English language proficiency for academic purposes. The speaker provided an overview of the exam structure, including the sections, question types, and scoring systems, to help participants understand the test formats.

Total Attendees: 87



## **6.3.3.i). Introduction | Machine Learning & Data Science Bootcamp | GDSC IIIT Sri City** | Feb 08, 2023

Speaker Session + Campaign Event (Campaign Name: ML-DS Bootcamp) The **announcement session for the GDSC Machine Learning and Data Science Bootcamp** (ML-DS Bootcamp). We explored what our **participants expect from us** and started working on an event series which would **teach them about the ML Domain**. Total Attendees: 69



### 6.3.3.j). Introduction to Golang | Feb 22, 2023

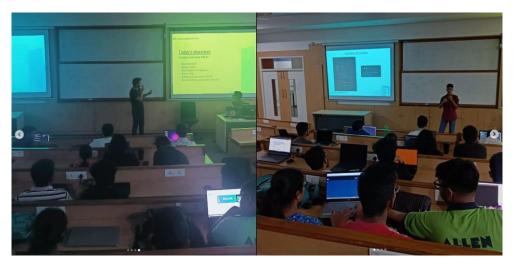
Speaker Session

In the speaker session, the focus was on introducing the programming language Go, commonly known as Golang. The session aimed to provide attendees with a comprehensive overview of Go's features, benefits, and applications. The speaker delved into the language's simplicity, efficiency, and strong support for concurrent programming, highlighting its suitability for building scalable and high-performance software systems.

Attendees learned about Go's syntax, standard library, and powerful tooling ecosystem, which enables rapid development and deployment. The session also covered real-world use cases and success stories, showcasing how Go has been embraced by industry leaders for building robust backend services, distributed systems, and cloud-native applications.

The speaker session offered valuable insights, practical tips, and inspiration for attendees to explore and leverage the potential of Go in their own projects and organizations.

Total Attendees: 27



## 6.3.3.k). ML-DS Bootcamp | Introduction | Mar 17, 2023

Speaker Session + Campaign Event (Campaign Name: ML-DS Bootcamp) The session provided a comprehensive understanding of the objectives, benefits, schedule, and policies of the boot camp.

- During the session, we discussed the following topics:
- A detailed outline of the boot camp curriculum
- Advantages of participating in the boot camp
- Timing and duration of the boot camp
- The possibility of holding doubt-clearing sessions
- Attendance, practice assignments, and quiz policies
- Prizes, and Goodies

We also had an "*Ask Us Anything*" segment where participants asked us questions and provided feedback.

Total Attendees: 81



# **6.3.3.1). Web 3 and Blockchain Workshop | Loarr x GDSC IIIT Sri City** | Mar 18, 2023

**Guest Speaker Session** 

A web3 and Blockchain Workshop hosted by **Mr. Bharath Pinaboyina, CEO, Loarr** and **supported by Filecoin.** We also had several guest speakers join us remotely for this event.

#### **Guest Speaker Details:**

Mr. Bharath Pinaboyina,

CEO, Loarr (joined us in-person, at the IIIT Sri City Campus)

#### **Remote Guest Speaker Details:**

• Juan Benet (Founder & CEO, Filecoin and Protocol labs)

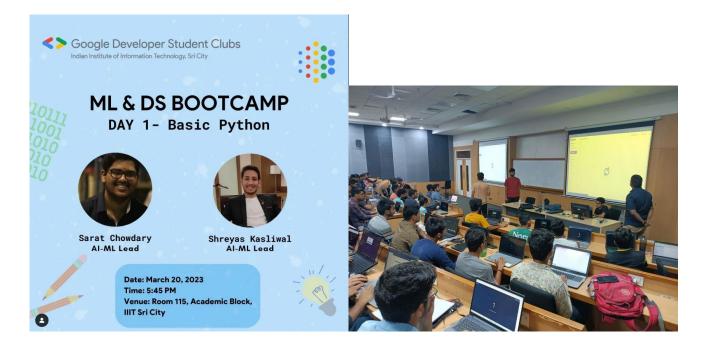
- Robert Dowling (Program manager, Filecoin Foundation)
- Ravikant Agrawal (VP Strategy, Polygon labs)
- Sarah Thiam (Developer Advocate, Filecoin VM)
- Aman Pandey (Global Developer Ecosystem lead, Polygon)

Total Attendees: 152



#### 6.3.3.m). Day 1 | Basic Python | GDSC ML-DS Bootcamp | Mar 20, 2023

Speaker Session + Campaign Event (Campaign Name: ML-DS Bootcamp)Day 1 of the ML-DS Bootcamp discussed setting up Python, MiniConda and JupyterNotebookonalocalmachine.Covered topics of Basic Python, like: Variables, Data types, Control structures (if-<br/>else, for loops, while loops), Functions, Lists, Tuples, Dictionaries, File Handling.<br/>Total Attendees: 113



#### 6.3.3.n). Day 2 | Pandas and Numpy | GDSC ML-DS Bootcamp | Mar 21, 2023

Speaker Session + Campaign Event (Campaign Name: ML-DS Bootcamp) **Day 2 of ML-DS Bootcamp** covered topics:

Numpy: Arrays, Array operations, Linear Algebra, Array indexing and slicing, Broadcasting Pandas: Dataframe and Series, Reading and Writing data

Total Attendees: 89



**6.3.3.0). Day 3 | Exploratory Data Analysis (EDA) | GDSC ML-DS Bootcamp |** Mar 24, 2023

Speaker Session + Campaign Event (Campaign Name: ML-DS Bootcamp) **Day 3 of ML-DS Bootcamp** covered topics: Data Exploration, Data Cleaning, Data Visualization, Data Transformation Total Attendees: 71



# **6.3.3.p). Day 4 | Exploratory Data Analysis (EDA) Part 2 | GDSC ML-DS Bootcamp** | Mar 29, 2023

Speaker Session + Campaign Event (Campaign Name: ML-DS Bootcamp)

Day 4 of ML-DS Bootcamp covered topics: Data Exploration, Data Cleaning,

Data Visualization, Data Transformation

Total Attendees: 22



# **6.3.3.q). Day 5 | Linear Regression and Logistic Regression | GDSC ML-DS Bootcamp** | Mar 30, 2023

Speaker Session + Campaign Event (Campaign Name: ML-DS Bootcamp)

**Day 5 of ML-DS Bootcamp** covered topics: What is Linear Regression?, Applications of Linear Regression, Math Behind Linear Regression, What is Logistic Regression?, Applications of Logistic Regression, Math Behind Logistic Regression

Total Attendees: 18



6.3.3.r). Day 6 | Model Evaluation | GDSC ML-DS Bootcamp | Apr 3, 2023

Speaker Session + Campaign Event (Campaign Name: ML-DS Bootcamp)

**Day 6 of ML-DS Bootcamp** covered topics: Confusion Matrix, ROC Curve, Some More Advanced Topics in ML

Total Attendees: 23



6.3.3.s). Introduction to Flutter and Firebase | Apr 12, 2023

Speaker Session

An introductory session for getting started with **building apps using Flutter** and deploying them in Google's Firebase.

Total Attendees: 21



#### 6.3.3.t). Dev-a-thon 2.0

**Dev-a-thon 2.0** was a highly anticipated event held as part of the **Utkrishtha 2023**. The event aimed to provide a platform for aspiring developers and technologists to showcase their skills, innovation, and problem-solving abilities. With participation from talented students across the institute forming **28 teams**, creating an environment conducive to collaboration and learning. Registration of over **28 teams** 

Total Participants: 80 Students

#### 6.3.3.u). HackFrenzy 2023 (07/03/2023 - 09/03/2023) (Offline Phase)

Hackathon conducted as part of Abhisarga 2023, sponsored by SONATA Software.

A National level hackathon sponsored by Sonata Software organized in collaboration with IOTA as a part of our esteemed techno cultural fest Abhisarga which attracted over 400 students and 151 teams across India. Final 18 teams were invited to participate and join us at the offline round of the contest. Students from all over India joined us for the offline round where the problem statement was "Agriculture Management" set by our esteemed faculty mentors.

Registration of over **151 teams, from PAN India** Total Participants: **414 Students** 



#### 6.3.3.v). Filecoin Orbit India Hackathon - IIIT Sri City

The Filecoin Orbit India Hackathon, organized by GDSC IIIT Sri City and sponsored by Filecoin India and Devfolio, was a dynamic Web3 hackathon that brought together the brightest minds in the field of technology and decentralized storage. With a prize pool of USD 250 and over 15 teams registered, the hackathon attracted a total of 51 enthusiastic students eager to showcase their skills and explore the potential of Web3 technologies.

Participants were challenged to leverage the **power of Filecoin**, a decentralized storage **network**, to **develop innovative solutions that addressed real-world problems.** Throughout the hackathon, participants were provided with mentorship, resources, and workshops to enhance their knowledge of Web3 technologies and facilitate their project development. '

The Filecoin Orbit India Hackathon **proved to be an engaging and collaborative event**, fostering creativity, learning, and the exploration of decentralized storage solutions. Registration of over **15 Teams** 

Total Participants: 51 Students



#### 6.3.3.w). CodeRush 2023 (Jan 22, 2023)

**CodeRush 2023**, **organized by GDSC IIIT Sri City** and **sponsored by AlgoUniversity**, was an **exhilarating live coding contest** that showcased the talents and skills of aspiring programmers. **Held on January 22, 2023**, the event attracted a diverse pool of participants eager to put their coding abilities to the test. **AlgoUniversity, backed by the prestigious Y Combinator**, provided valuable support and resources for the contest. Participants engaged in a series of challenging coding problems, pushing their limits and demonstrating their problem-solving provess within a limited timeframe.

The **contest fostered an environment of healthy competition**, and learning, as participants sought to find the most efficient and elegant solutions to the given coding challenges. **CodeRush 2023** was a platform where participants sharpened their coding skills, expanded their knowledge, and gained exposure to the industry's best practices. It provided an invaluable opportunity for **participants to showcase their coding talent** and potentially open doors to future opportunities in the field of technology.

Total Participants: 151 Students



#### 6.3.3.x). THREE HOURS BEHIND - A Scavenger Hunt

An Informal Technical scavenger hunt event which prompted our participants to put on their thinking hats in order to solve all the puzzles along the way.

Event conducted as part of Utkrishtha 2022, supported by IIIT Sri City.

Registration of over **39 teams** 

Total Participants: 187 Students



#### 6.3.3.y). Build-a-Bot Contest

A competitive programmable Bot building competition.

Event conducted as part of Utkrishtha 2022, supported by IIIT Sri City. -

Registration of over **22 teams** 

Total Participants: 45 Students

#### **Speed UI Competition**

A competitive Frontend Development competition.

Event conducted as part of Utkrishtha 2022, supported by IIIT Sri City. -

Registration of over 30 teams

Total Participants: 79 Students

#### 6.3.3.z)Google Cloud Career Practitioners Program (GCCP 202223)

The Google Cloud Career Practitioners Program (GCCP 2022-23) is an online cloud campaign designed to empower career practitioners and educators with the knowledge and resources to guide students in pursuing careers in cloud computing.

The program, initiated by Google Cloud, offers a comprehensive curriculum and training modules that cover various aspects of cloud technology, including fundamentals, architecture, data analytics, machine learning, and security. Through interactive online sessions, webinars, and hands-on labs, participants gain practical skills and insights into the latest cloud computing trends and best practices.

The **GCCP aims to equip career practitioners** with the necessary tools to help students explore cloud career pathways, understand industry demands, and make informed decisions about their educational and career journeys. By fostering a community of knowledgeable career practitioners, **the program aims to bridge the gap between academia and industry**, enabling students to succeed in the rapidly evolving field of cloud computing. Total Participants: 81 Students

## 6.3.4 Gradient Club:

#### 6.3.4. a) Utkrishta: Codex 15 Nov 2022:

It was conducted as part of Utkrishta Fest. Codex was a team based coding competition focusing on algorithms. Participants were required to form teams of upto 3. It was open for all UGs. The platform used was codeforces, and problems were set by the core team of gradient.



#### 6.3.4.b). Utkrishta: Coduo 18 Nov 2022:

Coduo was a solo coding contest consisting of 3 rounds. In round 1, one problem was given, and the one who solved it faster in a pair moved on to the next round. In the final round, the lockout format was followed, it had 5 problems with varying points.



6.3.4.c). Utkrishta: Girls Only Contest 18 Nov 2022:

This was a solo contest, consisting of 5 challenging problems, based on data structures and logical thinking. Female students from all UGs were eligible to participate.



**6.3.4.d). Placement Guidance session 25th Nov 2022**: This session was conducted to help the UG2 and UG3 students prepare for the upcoming placement season, as well as provide valuable tips to crack off campus companies. The speakers were from UG4.



**6.3.4.e).** Abhisarga: Elektra: Round 1 was held on **31st March 2023** on the unstop platform. It consisted of 5 algorithmic problems set by the gradient core team. Teams of up to 3 members were allowed, open to all institutes in India. The top 20 teams moved on to the next round. Round 2 was held on **9th April 2023** on our campus. It consisted of 6 innovative problems, to be solved within 2 hours.



**6.3.4.f). Introductory session and Contest** —Date: **6th Feb 2023**: Gradient has conducted a practice contest on **6th Feb 2023**. The duration was 2 hrs and it was aimed at beginners so feel free to participate regardless of your experience. Before the session we had introduced problem solving for the juniors and had a small Q & A session.



## 6.3.5. ConnexIon IoT club Activities

#### 6.3.5.a). Electrothon (18th November, 22):

Electrothon is making innovative projects related to embedded systems and the Internet of things. During the first round groups presented their project idea based on their ideology, the judges suggested a few changes if required. In round 2 projects are submitted and have been evaluated by judges based on three criterias. The judging criterias are completeness of the Working model proposed, complexity of the circuit and the way of presentation.



**6.3.5.b)** Going Green With Iot (18th November): In going green with Iot participants solved the problem from areas such as Agriculture, Home security systems, with the given microcontroller and sensors, and showed the output within the given time. The judging criterias were base UI, uniqueness in the idea and the novelty in it.



#### 6.3.5.c) Gizmocon:

GizmoCon, a three-stage IoT hackathon organized by the ConnexIon club of Indian Institute of Information Technology, forms an integral part of the techno-cultural fest, Abhisarga 2023. The first stage served as a screening process, designed to select the most promising candidates for the subsequent rounds, which were conducted offline within our institute premises.

#### Stage 1 (24th March, 2023) - Online Mode:

An online quiz was conducted to the students as a screening process in order to find the apt and eligible candidates for the offline hackathon event. The quiz was conducted on the kahoot platform with 36 teams participating in it. Out of the 36, 12 teams were invited to the subsequent rounds.

#### Stage 2&3 (7th - 9th April, 2023) - Offline Mode:

This phase of the hackathon was a prototype-building contest, wherein the participants were tasked with constructing a working prototype in the domain of IoT. Candidates were required to build their projects at their respective locations and bring them to the event venue, where a panel of three distinguished judges evaluated the submissions. Teams were granted a 90-minute window to incorporate the suggested modifications into their prototypes, following which a final assessment was made by the judges. The top 8 teams from the previous rounds were handpicked for the highly anticipated grand finale of the IoT hackathon. The problem statement, set forth by the same esteemed panel of judges as mentioned earlier, was handed to the students, who were granted a 36-hour window to conceive and execute a comprehensive solution. The ultimate judgment of the grand finale was conducted on 9th April at 10.30AM.



#### **6.3.5.d)** Fast tracking:

Fast tracking is an event where the participants are given a robotic car which was hand made by our students and the participant to cross the line the quickest wins. Controlling the bot with the remote, beating the finishing line as soon as possible was the task. Our club built a bluetooth controlled bot where the contestants controlled it through a remote. Participants controlled the bot through an obstacle-filled track and tried to reach the deadline at the earliest. Candidate with the least time was the winner.



## 6.3.6 Epoch (The AI/ML Club, IIITS):

#### 6.3.6.a) Introductory Session

At the beginning of the monsoon semester 2022, we conducted an introductory session for the new batch of students who are in their 1<sup>st</sup> year. We explained the motive of the club and how it is not just a place to gain knowledge but also to share ideas, improve your network and collaborate for projects. We saw many motivated and excited students who wanted to begin their journey in AI/ML. While it was still an informal session, we discussed some basic concepts and resources to begin.

#### 6.3.6.b) UPAI Hackathon

This was the first competitive event for the year 2022-23. We conducted this hackathon in a very unique manner. Participants were given multiple problem statements to choose from and once the team chose a problem statement, they had to provide an industrial use case scenario for the same. After doing so, participants had to build multiple models ranging from basic theoretical ML approaches to Deep Neural Networks and GANs. Teams were evaluated on the basis of the motivation for problem statement selection, complexity, performance of the model and timely submission. There were many teams ranging from UG-1 to UG-3 who gave their best to create unique models in a span of a few hours. This event was held online.

#### 6.3.6.c). ML Trivia

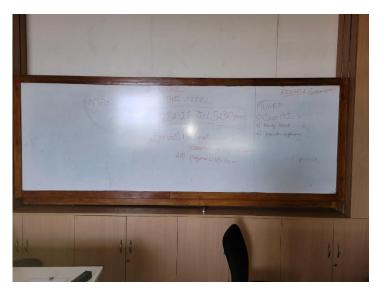
After the intense fight for creating the best models, it was time to test some basic ML concepts. As the name suggests, this was a quiz based round which tests the speed and accuracy of the participants. It consisted of 25 multiple choice questions tailored by us and was conducted on an online platform. 40+ students took part in this event battled for the top position in the leaderboard.



## 6.3.6.d) Hack the Function

This is yet another unique mini hackathon conducted by Epoch. Here, we created a dataset consisting of x and y such that f(x)=y. Participants have to use this dataset and guess the function that was used to obtain the values of y from the corresponding values of x. This function was not

a general polynomial nor was it periodic. So students had to go beyond basic approaches like interpolation methods and polynomial regression. We had a part of the dataset (not shown to participants) reserved for testing and the team with the lowest MSE error on the test dataset was declared the winner.



#### 6.3.6.d). Guess the Emoji

This was the 2<sup>nd</sup> round following "Hack the Function". Again, we created a custom dataset for this event. On first glance, it looked like a simple image classification task. However, on further analysis it, it can be observed that the resolution of this image was very low and it was very difficult to extract discriminative features from these images using conventional approaches. We created this dataset by carefully choosing some classes from the Google Draw Dataset and converting them into zipped NumPy arrays before giving them to the participants. It was a very good challenge to test important preprocessing skills and data augmentation techniques.



#### 6.4 Cultural club activities:

#### 6.4.1 The Adhyatmik activities by NIRVANA club

- A community was formed centered around the Adhayatmik interests and philosophical quests of students.
- With the active participation of a lot of students, we successfully conducted Saraswati Puja to invoke the divine within all scholarly efforts by seeking the blessings of Mother Goddess Saraswati Devi.
- With very active participation of our dear Marathi friends, we paid tribute to Shivaji Maharaj, and seeked the blessings of Ma Bhawani.
- We had a blast dancing to some of the most energetic songs written on Shivaji Maharaj.
- Forge a sense of camaraderie among hostel students by gathering around the First Floor common balcony, to chant Hanuman Chalisa. The beautiful rhythm and meaning of Hanuman Chalisa never bores anyone.
- A formal introduction session was held to make all students of the college aware of the existence of Nirvana.
- Club members communicated goals and objectives and shared vision of the whole year and the events/activities we have planned.
- To continue students' learning, and deepen students' connection with our roots, Nirvana has undertaken the extraordinary initiative of starting online Shrimad Bhagavad Gita Sessions. The sessions are recorded and uploaded to YouTube for the benefit of the larger public.



6.4.2 Annual Techno Cultural Fest of IIIT Sri City - Abhisarga

We had an amazing line-up of events and activities, including musical performances, dance shows, art exhibitions, cultural programs, technical competitions, and much more, conducted online and on campus. With more than 2000 students registered to participate in the event from over 45 colleges all over India.

Our clubs organized multiple fun activities for students to participate in and have a blast while winning prizes. We had the ISRO Space on Wheels Exhibition to fuel the curiosity of students and professors alike.

Y20 which raised awareness of global issues, exchanged ideas, and taught us how to argue and negotiate, to reach a consensus.

Ultimately to wind up the day fueled with neck-to-neck competition, we had DJ Night, Music, and Dance performances where everyone had a great time.













## 6.4.3. Dance club (Beatripperz)

## 6.4.3.a). Revive(Oct 2022):

REVIVE 2022 was held on our campus to restore our prestigious institution's cultural glory. Faculty, staff, their families, and students from all the batches participated in the celebrations and made the event memorable and cherishing.







#### 6.4.3.b). Uthkrishita (Nov 2022):

UTKRISHTA was the 2022 Techno Cultural Event. Many Exciting Events were held throughout the week by Technical and Cultural Clubs. The Last Day-An astonishing night was filled with spectacular dance performances from Beatripperz club, exciting musical performances from Reverb club, and some memorable performances from Mise-en-Scene club. It also had a prize distribution ceremony for all the winners.

Beatripperz stole the show at the Final Showdown cultural night with their spectacular dance performances, while also conducting formal workshops and informal interactions to engage and inspire the audience.

<u>Formal event:</u> Dance Fever (solo dance competition) <u>Informal events</u>: face-off battle, hook step challenge







#### 6.4.3.d). Republic day(jan 2023):

The 74th Republic Day was celebrated in IIIT SRICITY on 26 January 2023 (Thursday). The National Flag Was Unfurled by the Director followed by the National Anthem.



#### 6.4.3.e).Freshers day(Feb 2023):

Freshers 2023 was celebrated to welcome UG-1 students to our institution. It was a great event. The event started off with a beautiful devotion to Lord Ganesha in the form of a song and Lord Shiva in the form of a dance and ended with a splendid ramp walk. Following these two performances, the event was filled with group dances, group singing, skits, beatboxing, and much more. This event showcased the amazing talents of UG-1 students.



#### 6.4.3.f). Tirustava-2023(march 2023):

As Beatripperz, we participated in Tirutsava, the annual technocultural fest of IIT Tirupati, where our talented students from IIIT Sricity showcased their dance skills and mesmerized the audience. We took part in various technical and cultural events, adding our flair to the festivities, and our Proshows left the spectators delighted and entertained.

• Participated in the group dance battle and also solo battles.





#### 6.4.4. Reverb-Music Club

Reverb, the music club of our college, is a dynamic and passionate community of music enthusiasts. It serves as a platform for students to showcase their musical talents and explore their love for music. With a diverse range of genres and instruments, Reverb fosters creativity, collaboration, and growth. Through regular jam sessions, performances, and workshops, the club encourages members to develop their musical skills and create unforgettable musical experiences. Reverb is not just a club; it is a harmonious space that resonates with the vibrant spirit of music and brings like-minded individuals together.

#### 6.4.4.a). Ganesh Chaturthi (Day02)- Musical Night:

Reverb Music Club's Ganesh Chaturthi celebration featured an unforgettable musical night. Club members showcased their talents with mesmerizing songs and instrumental performances. The venue was adorned with vibrant decorations, setting a festive atmosphere. The evening brimmed with excitement as attendees eagerly awaited each performance. The club members' diverse musical abilities captivated the audience, creating an enchanting experience. Alongside the performances, fun games were organized to engage everyone and add to the festive spirit. To conclude the night on a high note, a thrilling DJ session had everyone dancing and celebrating Ganesh Chaturthi with joy. It was an event that brought together music, entertainment, and the spirit of the festival in a remarkable way.



#### 6.4.4.b). Revive

Revive, our college's cultural event, showcased mesmerizing musical performances by our talented student artists. The stage came alive with diverse genres, captivating the audience with soulful melodies and high-energy beats. The students skillfully blended traditional and contemporary elements, leaving an indelible impression on all who attended. Revive celebrated the power of music to inspire and unite, creating an unforgettable cultural extravaganza.



## 6.4.4.c). IIITS IDOL

Reverb organized "IIITS Idol," a captivating singing competition showcasing the talents of its students. The auditorium buzzed with excitement as participants took the stage, delivering mesmerizing performances. The event featured professional lighting and sound, enhancing the

experience. An esteemed singer kicked off the evening with an inspiring opening act. Each contestant showcased their vocal prowess, captivating the audience. The competition celebrated the art of singing, providing a platform for talented individuals to shine and creating an unforgettable musical event.

### 6.4.4.d). Musical Trivia

The Musical Trivia Quiz, a thrilling team competition, brought together music enthusiasts to showcase their knowledge. The event buzzed with excitement as teams gathered to test their musical expertise in a friendly and competitive atmosphere. An energetic host set the tone for the evening, creating an engaging experience. Teams eagerly answered questions, ranging from music history to identifying songs and artists. The event celebrated the love for music while challenging participants' knowledge, making it an unforgettable evening of fun and friendly competition.

#### 6.4.4.e). Utkrishta

At Utkrishta, our student-led event, the musical performances by our talented peers were simply amazing. They played and sang with so much passion and skill, leaving everyone in awe. From slow emotional songs to energetic beats, they made the event truly unforgettable and filled our hearts with joy.



## 6.4.4.f). Republic Day

On Republic Day, our college hosted a remarkable celebration filled with inspiring musical performances. The stage resonated with the melodious voices and harmonious instrumentals presented by our talented students. Each performance showcased patriotic tunes and traditional compositions that instilled a deep sense of national pride. The audience was captivated by the evocative melodies, which beautifully highlighted the spirit of unity and diversity. The musical performances on Republic Day served as a poignant reminder of our collective heritage and the values we hold dear.



## 6.4.4.g). Matribhasha diwas

During Matribhasha Diwas, everyone joyfully performed in their mother tongues, creating a beautiful tapestry of musical performances. The stage echoed with melodies that celebrated our diverse languages. Each singer poured their heart into the songs, making a deep connection with the audience. The performances showcased the power of language to bring people together, fostering a sense of pride and unity. Matribhasha Diwas was a memorable celebration that honored our linguistic heritage through the universal language of music.

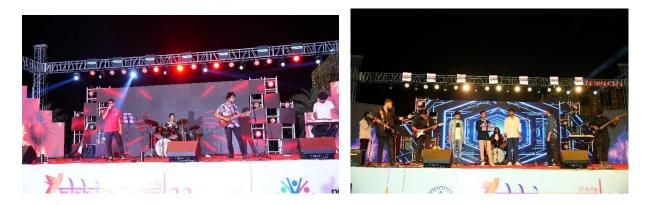
## 6.4.4.h). Ethnic Day

On Ethnic Day, the campus was alive with captivating music performances. Students showcased their talents through traditional songs and mesmerizing dances, spreading joy throughout. The air was filled with beautiful melodies and rhythmic beats that transported us to different cultures. The performances celebrated our diverse community and brought everyone together through the universal language of music. It was a day filled with harmonious tunes that filled our hearts with happiness and appreciation for our shared heritage.



#### 6.4.4.i). Abhisarga

**Home Performances:** ABHISARGA, our college's grandest event, featured amazing musical performances by our talented student band. The stage came alive with their energetic music and captivating melodies. The band members played together flawlessly, showcasing their passion and talent. Their performance left a lasting impression on the audience, making ABHISARGA truly unforgettable.



**Rhythm Riot:** Rhythm Riot, the ultimate Battle of Bands competition, gathered talented student musicians from different colleges. The atmosphere was electric as each band took the stage, showcasing their unique sound and style. The air filled with powerful riffs, captivating solos, and infectious rhythms. The competition was fierce, as bands battled for the top spot, displaying their musical prowess and stage presence. Rhythm Riot celebrated the passion for music and provided a platform for budding artists to shine, leaving the audience in awe of the incredible talent displayed by the participating college bands.



**Musical Treasure Hunt:** Musical Treasure Hunt, an exciting informal event during Abhisarga, added a unique twist to the festivities. Participants embarked on a musical adventure, solving clues that led them to hidden musical treasures scattered across the campus. Each clue was accompanied by a musical element, such as a song snippet or a musical instrument clue. The participants eagerly explored different

locations, following the musical trail, and were rewarded with delightful surprises. This interactive and entertaining event blended the thrill of a treasure hunt with the enchantment of music, creating a memorable experience during Abhisarga.

## 6.4.5. F/STOPS PHOTOGRAPHY CLUB

The Photography Club F/Stops is a dynamic community of photography enthusiasts who come together to explore the art of capturing moments. With a focus on fostering creativity and technical skill development, the club provides a platform for members to share their passion for photography.

## 6.4.5.a). Photo Genius Photography Contest (Club members) (November, 22)

This is a contest conducted by the Club for the club members, where each contestant should capture the photos based on the theme provided a on the day of the contest



## 6.4.5.b). Class Photo Session – Ethnic Day (25-03-2023)

The club has conducted a class photo session for students of each year on Ethnic day 2023. The club has also conducted an individual photo session.



#### 6.4.5.c). Camera ON – Photography contest @ Abhisarga 2023 (Apr 7,8,9, 23)

Camera ON is a photography contest conducted by F/Stops for Abhisarga 2023. The contest has three rounds in which each team has to submit pictures based on the theme for the round and the picture should be taken on the campus premises.





## 6.4.5.d). Introductory Session for Juniors (30-01-2023)

An introductory session for the juniors, about the club and its activities to help them better understand the working and the goal of the club, and interest them in joining the club.

#### 6.4.5.e). Photography Basics session for Club members

A session about the basics of photography for newly joined club members. The session is about the working of a camera, color theory, and other important things that are useful for a photographer.

#### 6.4.5.f). Photobooth @ Abhisarga 2023 (April 7, 8, 9, 2023)

F/Stops has held a Photobooth - Proptography contest for Abhisarga 2023. In which participants have to take pictures of them using the props provided by F/Stops and Arts Club. The winners' pictures were uploaded in the Club's official Instagram page.



Additionally, the club takes pictures of all the cultural and technical events conducted by student councils, clubs, and management.



## 6.4.6. Meraki- Arts Club

## **6.4.6.a).** Paint Aura (8<sup>th</sup> April 2023):

The most awaited event Face painting 'PAINT AURA'. A team member should paint the face of their team mate depicting any beautiful painting giving a beautiful message. Bonus points are given if the painting is related to India's culture. Judgment is based on the beauty of the art and also the rationale of the painting should be clearly explained. The event was set from 11 am - 1 pm. Art supplies are provided and winners are appreciated with exciting prizes.









## 6.4.6.b). Cool Char 7th June 2023:

Another exciting art competition COOL CHAR was held this day from 2-5pm. The participants were asked to depict their dream or inspiring character of their own into their art. This was held to bring out the hidden talents of many artists and appreciate them, this competition helps artists and enthusiastic students to let their ideas out. This brings out the creativity of the student and the creativity is appreciated with cool prizes.







## 6.4.6.c). Hall-O-ween 19<sup>th</sup> November 2022:

The theme was chosen as Halloween and it's the participants choice to draw any kind of art form of their choice. Whether it can be Sketching, painting, digital-art etc., The best of arts were selected by the club mentor. The event is of duration 1 hour. We are very excited that we got a lot of participation from the students and the event was a grand success.

## 6.4.7. Mise-en-scene (Film club)6.4.7.a). Film Screening(Oct 4 2022)

A film screening conducted by a film club (Mise-en-scene) is an event that brings together film enthusiasts, students, and members of the community to watch and discuss films. These screenings are organized by film clubs or societies, which are typically student-run organizations but can also exist in other community settings.

The purpose of a film screening conducted by a film club is to provide a platform for film lovers to come together and appreciate cinema as an art form. These events often focus on a particular genre, theme, director, or period in film history. They can showcase a range of films, including classics, independent films, foreign films, or even recent releases.

After the screening, there is often a post-screening discussion where attendees can share their thoughts, interpretations, and reactions to the film. This discussion encourages dialogue, critical thinking, and the exchange of different perspectives. Participants can analyze the film's themes, symbolism, narrative structure, and cinematography, fostering a deeper appreciation for the art of filmmaking.

Film screenings conducted by film clubs can also include additional activities to enhance the overall experience. These may include film trivia quizzes, poster displays, short film screenings, or even live performances related to the film or its themes.

Overall, a film screening conducted by a film club provides an enriching and communal experience for film enthusiasts. It serves as a platform for exploring diverse films, fostering a deeper understanding and appreciation of cinema, and connecting with like-minded individuals who share a passion for the art of filmmaking.

#### 6.4.7.b) Introductory Session 21st February 2023

The introductory session conducted by a film club is a crucial event designed to welcome and acquaint new members with the club's activities and foster a sense of community among film enthusiasts. This session typically begins with a warm greeting from the club's organizers, who provide an overview of the club's history, purpose, and goals.

They highlight the range of activities members can expect, such as film screenings, discussions, workshops, and collaborative projects, emphasizing the club's dedication to promoting a diverse and inclusive film culture. The organizers also outline the process of becoming a member, emphasizing the benefits and encouraging active participation. The session often includes a Q&A and discussion segment, allowing participants to ask questions, clarify doubts, and engage in dialogue with the organizers and fellow attendees. By the end of the session, participants gain a solid understanding of the film club's mission, its values, and the opportunities available, leaving them inspired and eager to immerse themselves in the vibrant film community.

The introductory session serves as an opportunity for attendees to connect with like-minded individuals who share a passion for film. Besides the informative aspects, it also provides a space for networking and socializing. Participants can engage in casual conversations, exchange recommendations, and form connections that extend beyond the session itself. The session sets the stage for an inclusive and engaging film club experience, where members can further their love for cinema, deepen their understanding of film as an art form, and collaborate with others who appreciate the power of storytelling through movies.

## 6.4.7.c). Movie trivia ,November 2022, Apr 9, 2023

The film club organized an exciting and engaging movie trivia event that had participants on the edge of their seats. With a generous prize pool of 10k, the stakes were high, and the competition was fierce. The trivia contest covered a wide range of film-related topics, including iconic movies, famous directors, memorable quotes, and various genres. Participants were challenged to test their knowledge and quick thinking as they raced against the clock to provide accurate answers. The event was not only a thrilling experience but also an opportunity for film

enthusiasts to showcase their expertise and share their passion for cinema with fellow club members. The competitive atmosphere, combined with the enticing prize pool, created an electric energy that kept everyone engaged and motivated throughout the trivia session.

The movie trivia event organized by the film club was more than just a fun competition—it was a celebration of cinema and a gathering of passionate film lovers. The impressive prize pool of 10k added an extra level of excitement and incentive for participants to demonstrate their movie knowledge.

As the questions were posed, the room buzzed with anticipation, and participants put their thinking caps on to come up with the correct answers. The event not only tested their film knowledge but also sparked conversations and friendly debates among attendees, fostering a sense of camaraderie and shared enthusiasm.

Ultimately, the movie trivia event showcased the vibrant film community within the club, where members came together to celebrate their love for movies, bond over shared interests, and create lasting memories.



## 6.4.7.d). Short film competition November22 2022, Apr 7, 2023

The film club organized an exhilarating short film competition that captivated both participants and audiences alike. With an impressive prize pool of 30k, the competition attracted aspiring filmmakers and creative storytellers from all backgrounds. The event provided a platform for filmmakers to showcase their talent, imagination, and unique storytelling abilities within the medium of short films.

Participants crafted their narratives, exploring various themes, genres, and artistic techniques to leave a lasting impact on the judges and viewers. The competition fostered a spirit of innovation and creativity, encouraging filmmakers to push boundaries, experiment with their craft, and present their compelling stories on the big screen. The high stakes of the prize pool added an extra level of anticipation and motivation, resulting in a showcase of outstanding short films that enthralled and inspired the audience.

The short film competition conducted by the film club was not just a display of creative talent but also a celebration of the art of filmmaking. Filmmakers poured their hearts and souls into

their submissions, bringing their visions to life and captivating the audience with their storytelling prowess. The diverse range of entries offered a glimpse into different perspectives, cultures, and artistic styles, showcasing the immense power of short films as a medium of expression. The competition created a sense of community and camaraderie among the filmmakers, fostering connections and providing a platform for feedback and constructive critique.

The substantial prize pool of 30k served as a testament to the film club's commitment to supporting emerging talent and rewarding exceptional filmmaking.

THUE OF INFORMATION TECHNOLOGY

In the end, the short film competition was not just about the prize, but about the passion for storytelling and the opportunity to shine a spotlight on emerging filmmakers

6.4.7.e). Skit competitions (17th February 2023), (April8th 2023):







A theater competition (skit) where participants compete with other teams on the basis of the essence of their act.Chit-chat(April 9th 2023)The session with Sri Vidya, an accomplished actress, film producer, and critic, provided valuable insights into the world of film production, marketing, and criticism. Her experiences and knowledge shared during the talk shed light on the collaborative nature of filmmaking, the significance of effective marketing strategies, and the importance of storytelling. Interacting with students, Sri Vidya not only answered their questions but also inspired and motivated them to pursue their passion for the film industry. The session was marked by a sense of joy and enthusiasm, making it an enriching and memorable experience for all involved.



# IMPACT

Each batch of students graduating from the institute would be looking for opportunities for good jobs and higher studies. It will be one of the joyous moments if all the graduates are able to get what they aspire for, as they leave the campus.

Although the overall preparedness is relatively better, the institute is yet to demonstrate that the students are able to garner good jobs, comparable to the top few IIITs. There is a need to focus on the strengths and areas of improvement at the individual level, through a systematic approach. It broadly focuses on individual-based mentoring for career guidance to achieve defined goals.

Fortunately, we have excellent faculty members who have received their education from leading universities, and some of them have significant industry experience. No other comparable institute has this unique advantage, which could be exploited beyond achieving excellence in teaching-learning and research. Thankfully, they also consider the success of the students, achieved through jobs and higher studies, as an integral part of their role as faculty.

IIIT Sri City is delighted to announce that the faculty members have committed their support to a new mentorship programme, called **IMPACT**. Under this programme, a group of students are assigned to each faculty for comprehensive guidance. They will guide and support the students to develop necessary skills & competencies and ensure that their career goals are achieved.

IMPACT is a semi-structured programme. While it is structured in setting goals, tracking progress and achieving final results for each student, it is unstructured in the process of engaging with students. Each faculty may use diverse formal-cum-informal approaches to achieve effectiveness.

The faculty members will be having regular interactions with the students on a weekly basis ensuring the success of the IMPACT programme and helping the students come out in flying colours.

IMPACT aims to have a significant impact, resulting in transformational outcomes. Many great things in the world have started in small ways. Everybody should work together to achieve great things which would also take the institution to greater heights.

# Favourite 25

# Support for Slow learners:

The institute has a significant focus on improving the quality of teaching-learning so as to create valuable opportunities for placements and higher studies for students. However, due to socio-economic and rural backgrounds, a section of the first year students is not able to cope up with the rest of the class. Special efforts are being taken to support such students. Firstly, students whose performance in the continuous assessment falls in the bottom 25% of the class are identified. These students are mentored and supported through a programme, called "Favorite 25". Faculty, students, staff and others put in their voluntary efforts to help these students to improve their performance. In addition, Formative Assessment (FA) has been introduced to help students who fail in the semester examinations. Under Formative Assessment, students undergo additional classes and mentoring, and clear the subjects by completing all the continuous assessment and final examination before the beginning of next semester. This helps students to achieve the required level of competences so that they are fully prepared to take up advanced courses without dropping for a year.

# 7. People/ Human Resources

# 7.1 Faculty:

In order to meet the present and future geo-socio-economic needs, we lay great emphasis on recruiting world class faculty who are strong in teaching and research areas.

All faculty members hold Ph.Ds from the finest institutes across the globe with a minimum of three years of post-doctoral experience and almost all have significant global exposure. They have published papers in various national and international journals and conference proceedings and attended / organized several workshops, both at national and international level.

SNo.	Name	Designation	Domain
1	Prof. G.Kannabiran	Director	CSE
2	Dr Rajendra Prasath	Associate Professor	CSE
3	Dr Viswanath Pulabaigari	Associate Professor	CSE
4	Dr Balaji Raman	Associate Professor	CSE

5	Dr Odelu Vanga	Assistant Professor (Grade I)	CSE
6	Dr Mrinmoy Ghorai	Assistant Professor (Grade II)	CSE
7	Dr Neha Agrawal	Assistant Professor (Grade II)	CSE
8	Dr. Piyush Joshi	Assistant Professor (Grade II)	CSE
9	Dr. P.V.Arun	Assistant Professor (Grade II)	CSE
10	Dr Nikhil Tripathi	Assistant Professor (Grade II)	CSE
11	Dr Arijit Roy	Assistant Professor (Grade II)	CSE
12	Dr Himangshu Sarma	Assistant Professor (Grade II)	CSE
13	Dr. Girish G N	Assistant Professor (Grade II)	CSE
14	Dr.Balasubramanian Kandaswamy	Assistant Professor	CSE
15	Dr Sreeja SR	Assistant Professor	CSE
16	Dr Annushree Bablani	Assistant Professor	CSE
17	Dr Bheemappa Halavar	Assistant Professor	CSE
18	Dr Shhathanaa	Assistant Professor	CSE
19	Dr Amit Praseed	Assistant Professor	CSE
20	Dr Rakesh Kumar Sanodiya	Assistant Professor	CSE
21	Dr.B.Krishna Priya	Assistant Professor	CSE
22	Dr Priyambada Subudhi	Assistant Professor	CSE
23	Dr.S.Manipriya	Assistant Professor	CSE
24	Dr Chandra Mohan D	Assistant Professor	CSE
25	Dr Pavan Kumar B.N.	Assistant Professor	CSE
26	Dr Kamalakanta Sethi	Assistant Professor	CSE
27	Dr. V.Ramesh Kumar	Assistant Professor	CSE
28	Dr Amilpur Santhosh	Assistant Professor	CSE
29	Dr Lokendra Chouhan	Assistant Professor	CSE
30	Dr K.Siva Prasad	Associate Professor	ECE
31	Dr Hrishikesh Venkataraman	Associate Professor	ECE
32	Dr Anish Chand Turlapaty	Associate Professor	ECE
33	Dr Kandimalla Divyabramham	Assistant Professor (Grade I)	ECE
34	Dr Raja Vara Prasad Yerra	Assistant Professor (Grade I)	ECE
35	Dr Achintaya Kumar Sarkar	Assistant Professor (Grade I)	ECE
36	Dr Priyanka Dwivedi	Assistant Professor (Grade I)	ECE
37	Dr Padmini Singh	Assistant Professor	ECE
38	Dr Namitha A.S.	Assistant Professor	ECE
39	Dr Rajeev Kumar	Assistant Professor	ECE
40	Dr E.Paul Braineard	Assistant Professor	ECE
41	Dr.Mainak Thakur	Assistant Professor	Mathematics and
42	Dr Chiranjit Ray	Assistant Professor	Data ScienceMathematics andData Science

### 7.2 Visiting Faculty

SNo.	Name of the faculty	Course Name	
1	IT Project Management	Mr. Jaydip Das	
2	Personal Growth Lab	Dr. Jose MF	
	Professional Communication, Essential Dr.Divya John		
3	English and Advanced Communication	Dr.Vanitha	
	Skills,Operational Communication	Dr. Shrimathy Venkatalakshmi	
4	ICT for Development	Dr. Pankaj Kumar	
5	Climate Change and Implication	Dr. Raji P	
6	Skills for Employability	Dr. Ravi Thilagan	
7	Energy and Environment Science	Dr. Ruben Sudhakar	
	Quantum Information and Computing	Dr.Brijesh Mishra	
8		Dr. SivaKumar	
9	Macro Economics and Personal Finance Mr. K M Padmanabhan		
10	Innovation and Entrepreneurship Mr. Satish Medapati		
11	Aptitude and Reasoning	Ms. Shabana Imran Khan	
12	Foundation of Human Values Art of Living		

# 7.3 Staff

SNo.	Name	Designation	
1	Evani VSSR Somayajulu	Manager, Registrar's Office	
2	P V Someswara Rao	Asst. Manager (Accounts)	
3	K Lalin Kumar Reddy	Assistant Manager-F&A	
4	S.Jyothi Rani	Asst. Manager, EC Lab	
5	Udiyapuram Tulsidas	Physical Education Instructor	
6	Vijay Kumar S	Engineer, CSE Lab	
7	Koteswararao B	Engineer, CSE Lab	
8	A Korian	Engineer, EC Lab	
9	A.Suneetha	Assistant Manager (Academics)	
10	M.Suresh Reddy	Tutor for EC Lab	
11	M Sukirthi Vyas	Assistant-Academics	
12	G.Muralikrishnan	Library Assistant	
13	M. Tiripalu	Assistant (Accounts)	
14	D.Sunil	Assistant (F&A)	
15	P Naresh	Senior Intern	
16	I Ravi Teja	Senior Intern	
17	G.Prasuna Oduru	Resident Warden (Girls Hostel)	
18	G.Venkaiah	Attender	

19	D.Bhaskar	Supervisor-Housekeeping (Operations and Maintenance)	
20	B.Suresh	Office Assistant	
21	Supriya Raj	Intern	
22	T.G.Kirubakaran	Intern	
23	N.Mahesh Babu	Intern	
24	T.Suganya	Helper	
25	K.Muniratnamma	Care taker - Girls Hostel	
26	K.Kanakeswara Rao	Plumber	
27	S.Kishore	Electrician	
28	P.Gopi	Multi Skilled Intern	
29	C.Balanjaneyulu	Multi Skilled Intern	
30	P.Sambachari	Electrician	
31	V.Muni Mahesh	Multi Skilled Intern	
32	B.Mahesh	Administrative Assistant	
33	Ch.Gandhi	Site Engineer	
34	M.Nandini	Caretaker (Girls Hostel)	
35	D.Harikrishnam Raju	Assistant Manager (Procurement)	
36	M.Sukeethi	Manager (Research & TBI)	
37	N.Peddiah	Assistant Manager (Facilities Management)	
38	M.Sohelu	Assistant Manager (Project Management- Construction)	

# 7.4 Consultants

SNo.	Name	Designation	
1	Shri G.Thirunavukkarasu	Senior Project Manager	
2	M Michayelu	Training and Placement Officer	
3	Mr P.Krishna Moorthy	Manager (TBI)	

#### 8. Research and Development

#### **Research & Development:**

During the period of April 2022 to March 2023, the faculties, along with the PG & UG students and their collaborators have published an impressive number of 17 journal papers. This involves mostly international journal publications such as in Elsevier, IEEE Transactions, Neural Computing and Applications, IEEE Sensors Letters, The Journal of Supercomputing, Neurocomputing, Neural Networks, Journal of Cleaner Production, IEEE Internet of Things Journal, ISPRS Journal of Photogrammetry and Remote Sensing. Notably, the faculty members and the students have presented in 20 national and international conferences during this period. Further, 1 Indian patent has been filed during this period.

### **8.1 Research Publications**

#### **Publication in Journals**

- 1. Shathanaa Rajmohan; Elakkiya E; Sreeja S R; (2022). Multi Cohort Whale Optimization with Search Space Tightening for Engineering Optimization Problems; Neural Computing and Applications.
- 2. Sreeja. S. R., Debasis Samanta; Dictionary reduction in sparse representation-based classification of motor imagery EEG signals; Multimedia Tools and Applications; Feb 2023.
- Sreeja. S. R., Shathanaa Rajmohan, Manjit Singh Sodhi, Debasis Samanta, Pabitra Mitra; Dictionary Learning and Greedy Algorithms for removing Eye Blink Artifacts from EEG Signals; Circuits, Systems, and Signal Processing; April 2023 (Accepted)
- 4. Neha Agrawal, Rohit Kumar, "Security Perspective Analysis of Industrial Cyber Physical Systems (I-CPS): A Decade-wide Survey." ISA transactions, Elsevier, 130, 10-24, 2022
- Rohit Kumar, Neha Agrawal, "RBAC-LBRM: An RBAC based Load Balancing assisted Efficient Resource Management Framework for IoT-Edge-Fog Network." IEEE Sensors Letters, 2022
- 6. Rohit Kumar, Neha Agrawal, "A survey on software-defined vehicular networks (SDVNs): a security perspective" The Journal of Supercomputing, 1-33, 2022
- 7. Sarvani, C. H., Shiv Ram Dubey, and Mrinmoy Ghorai. "UFKT: Unimportant filters knowledge transfer for CNN pruning." Neurocomputing 514 (2022): 101-112.
- 8. Sarvani, C. H., et al. "Hrel: Filter pruning based on high relevance between activation maps and class labels." Neural Networks 147 (2022): 186-197.
- 9. Gorripati, Ravi, Mainak Thakur, and Nagesh Kolagani; "A framework for optimal rank identification of resource management systems using probabilistic approaches in analytic hierarchy process." Water Policy (2022).
- 10. Ejurothu, Pavan Sai Santhosh, Subhojit Mandal, and Mainak Thakur. "Forecasting PM2.
  5 Concentration in India Using a Cluster Based Hybrid Graph Neural Network Approach." Asia-Pacific Journal of Atmospheric Sciences (2022): 1-17.
- Mandal, S., & Thakur, M. (2023). A city-based PM2. 5 forecasting framework using Spatially Attentive Cluster-based Graph Neural Network model. Journal of Cleaner Production, 405, 137036.

- 12. Nadezhda Briantceva, Lokendra Chouhan, Matteo Parsani, Member, and Mohamed-Slim Alouini Impact of evanescence process on three dimensional sub-diffusion based molecular communication, IEEE Transactions on Nanobioscience.
- 13. L. Chouhan and M. -S. Alouini, "Interfacing of Molecular Communication System with Various Communication Systems over Internet of Every Nano Things," in IEEE Internet of Things Journal, doi: 10.1109/JIOT.2023.3273030.
- 14. M Rahil, BN Anoop, GN Girish, AR Kothari, SG Koolagudi, Jeny Rajan, "A Deep Ensemble Learning-Based CNN Architecture for Multiclass Retinal Fluid Segmentation in OCT Images", IEEE Access, Volume 11, Pages 17241-17251, IEEE, Mar 2023. (Impact Factor: 3.47)
- 15. Rakesh Kumar Sanodiya, Shreyash Mishra, Satya Rajendra Singh R., Arun P.V., Manifold embedded joint geometrical and statistical alignment for visual domain adaptation, Knowledge-Based Systems, Volume 257, 2022, 109886. https://doi.org/10.1016/j.knosys.2022.109886 [IF: 8.139, Q1]
- 16. P.V. Arun, and A. Karnieli, "Augmentation of vegetation index curves considering the crop-specific phenological characteristics Capsule-based latent space encoding for spectral unmixing," IEEE Journal of Selected Applications in Remote Sensing, vol. 15, pp. 1235-1243, 2022. https://doi.org/10.1109/JSTARS.2022.3142395 [IF: 4.715, Q1].
- P.V. Arun, and A. Karnieli, "Capsule-based latent space encoding for spectral unmixing," ISPRS Journal of Photogrammetry and Remote Sensing, vol. 183, 2022, no. 1, pp. 307-320, Jan. 2020. https://doi.org/10.1016/j.isprsjprs.2021.11.008 [IF: 11.774, Q1].

#### 8.2 Conference Proceedings/Presentations

- Sadu S, Dubey SR, Sreeja SR. Moment Centralization based Gradient Descent Optimizers for Convolutional Neural Networks. International Conference on Computer Vision and Machine Intelligence (CVMI), 12-13 August 2022, IIIT Allahabad, Prayagraj, INDIA
- Shathanaa Rajmohan, S R Sreeja, E Elakkiya, MS3A: Wrapper based Feature Selection with Multi- swarm Salp Search Optimization, International Conference on Advances in Data-driven Computing and Intelligent Systems (ADCIS 2022), SEPTEMBER 23-25, 2022, BITS Pilani, K K Birla Goa Campus, India
- Santosh Kumar Satapathy, Hari Kishan Kondaveeti, S R Sreeja, An automated system for sleep staging using EEG brain signals based on a machine learning approach, IEEE 19th India Council International Conference INDICON 2022, 24th - 26th November, Kochi Kerala, India
- 4. Santosh Kumar Satapathy, Hari Kishan Kondaveeti, S R Sreeja, Development of Efficient Ensemble Model based on Stacking Learning for Automated Sleep Staging, IEEE International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT) 2022, Sakheer, Bahrain

- Santosh Kumar Satapathy, Hari Kishan Kondaveeti b, S R Sreeja, Hiral Madhani, Nitinsingh Rajput, Debabrata Swain; A Deep Learning Approach to Automated Sleep Stages Classification Using Multi-Modal Signals; Procedia Computer Science; Volume 218, 2023, Pages 867-876
- 6. Shathanaa Rajmohan, ManiTej M, Shankar S, Pavan K T, Online Grading of Fruits using Deep Learning Models and Computer Vision, International Conference on Intelligent Systems & Computation (Scopus), PIET, 2022, Jaipur
- 7. Shathanaa Rajmohan, Sreeja S R, Elakiya E, MS3A: Wrapper based Feature Selection with Multi- swarm Salp Search Optimization, International Conference on Advances in Data-driven Computing and Intelligent Systems (ADCIS), 2022, BITS Goa (Scopus)
- 8. Prameela M, Shathanaa Rajmohan, A Study on Legal Judgment Prediction using Deep Learning Techniques, IEEE Silchar Subsection Conference 2022, (IEEE SILCON)
- 9. Atharva D, Shathanaa Rajmohan, JOWTS: A Differential Evolution Based Approach for Microblog Summarization With Advanced Population Enhancement Techniques, IEEE Silchar Subsection Conference 2022, (IEEE SILCON)
- 10. K. C. Jabu, M. Ghorai and R. V. Prasad, APFNet: Attention Pyramidal Fusion Network For Semantic Segmentation, CVMI, 2022.
- 11. S. J. Aithal, S. P. Adhikari, M. Ghorai and H. Misra, Balanced Sampling Based Active Learning for Object Detection, CVMI, 2022.
- 12. K. Lambat and M. Ghorai, Multi-scale Contrastive Learning for Image Colorization, CVMI, 2022.
- 13. Kishore, SR Nandha, Mainak Thakur, and Subhojit Mandal. "Forecasting of Wind Speed at Offshore Wind Site-A Case Study." OCEANS 2022-Chennai. IEEE, 2022.
- Kusuru, Durgesh, V Bala Naga Jyothi, Imandi Raju, Turlapaty Anish Chand, and Thakur Mainak. "A Gaussian Gamma mixture model for Indian ocean surface wind speed." In OCEANS 2022-Chennai, pp. 1-5. IEEE, 2022.
- 15. Mandal, Subhojit, Mainak Thakur, Anish C. Turlapaty, Riyaaz Uddien Shaik, and Laneve Giovanni. "Application of Prisma Hyperspectral Data for PM 2.5 Estimation: A Case Study on New Delhi, India." IGARSS 2022-2022 IEEE International Geoscience and Remote Sensing Symposium. IEEE, 2022.
- 16. Abhinav Kumar, Lokendra Chouhan, Prabhat Kumar Sharma, Range Expansion in Neuro-spike Synaptic Communication: Error Performance Analysis EAI, BICT, Okinawa, Japan, 2023.
- 17. Hemanth Pasupuleti, Abhishek R. Kothari, G. N. Girish, "Unsupervised Image to Image translation for multiple retinal pathology synthesis in optical coherence tomography

scans", ", in Seventh International Conference on Computer Vision and Image Processing (CVIP-2022); VNIT Nagpur, INDIA: Springer, Nov 2022. (Accepted and Presented).

- Saravanan, M., Bablani, A., Rangisetty, N. (2022). Evolving Spiking Neural Network as a Classifier: An Experimental Review. In: Singh, M., Tyagi, V., Gupta, P.K., Flusser, J., Ören, T. (eds) Advances in Computing and Data Sciences. ICACDS 2022. Communications in Computer and Information Science, vol 1614. Springer, Cham.
- 19. Balaji, T.K., Bablani, A. and Sreeja, S.R., 2022, February. Opinion mining on COVID-19 vaccines in India using deep and machine learning approaches. In 2022 International Conference on Innovative Trends in Information Technology (ICITIIT) (pp. 1-6). IEEE.
- 20. M. M. Sahoo, Pattathal Vijayakumar, A., Herrmann, I., Mathew, S. K., and Porwal, A.: Estimation of point spread function for unmixing geological spectral mixtures, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022, EGU22-8712, https://doi.org/10.5194/egusphere-egu22-8712, 2022.

#### 8.3 On-Going Sponsored Projects (2022-23)

- 1. Dr. P.V. Arun, SERB CRG, Development of a generic spatial data warehousing framework and illustration for protected area monitoring and landslide susceptibility mapping, Rs. 23,00,000, Jan-2023.
- 2. Dr. P.V. Arun, ISRO, Advanced Machine Learning approaches for geological mapping of Lunar surface using Ch-2 Data, Rs. 20,00,000, Nov-2023.
- 3. Dr. P.V. Arun, ISRO, Advanced Machine Learning approaches for multimodal data fusion, Rs. 25,00,000, March-2023.
- 4. Dr. Raja Vara Prasad Y- MEITY CC & BT-"Design and Fabrication of Autonomous Passenger Drone"- Rs.36,18,000-26-Jul-19-25-Jul-22
- Dr Raja Vara Prasad Dr. Balaji Raman and Dr. Divyabrahmam Kandimalla DST-NMICPS-TIH IIT Hyderabad – "Advanced Aerial Mapping (AAM) Rider: Yield Detection System for Mango Farms using UAVs" Rs.49,96,100 3rd July 2021 to 2nd July 2024
- 6. Dr Balaji Raman, Dr. Piyush Joshi, DST-NMICPS-TIH IIT Hyderabad Design, development, and deployment of energy-efficient smart EDGE devices for real-time traffic flow prediction and control, Rs.40,00,002, 23rd July 2021-22nd July 2024
- Dr Balaji Raman, Dr Neha Agrawal DST-NMICPS-TIH IIT Kanpur- "Secure Drones: Analyze, Deploy, and Decide Cryptographic Modules in UAVs Rs.37,00,480 Nov-21 to Nov-24
- 8. Dr Himangshu Sarma SERB-SRG-"Development of Game platform through VR and AR for School Education "Rs.16,40,720 Dec-21 to Dec-23

#### 8.4 Patents Filing

1. Innovation Patent: "A SYSTEM AND METHOD FOR DETERMINING TRUTHFUL AND DECEPTIVE STATE OF A PERSON" Annushree Bablani, Damodar Reddy Edla; Reddy, NIT Goa, Granted Patent No. 2021102773, IP Australia, March 2022

# 9. Innovation and Entrepreneurship Development

Focus on Innovation and Entrepreneurship: IIIT Sri City promotes a culture of innovation and entrepreneurship to help faculty and students to fulfill their potential and to serve the needs of the community. We foster entrepreneurship and innovation through several ways. IIIT Sri City has been selected by MoE Innovation Cell to act as an Institute Innovation Council. Furthermore, IIIT Sri City has established an Entrepreneurship Cell (E-cell) to support and enable students to create innovative ideas and convert them into business opportunities. E-cell trains students on how to be successful entrepreneurs with social responsibility.

Keeping up with the spirit of entrepreneurship, in 2020, we launched our TBI, Gyan Circle Ventures (The legal entity being Centre for Innovation and Entrepreneurship Development at IIITS (CIED), an independent Section 8 Non-profit organization). The Business Incubator is one of the strategic priorities of the institute to promote innovation and entrepreneurship in the region, in several areas including but not limited to, Infrastructure Development and Smart Manufacturing. We strongly believe that Gyan Circle Ventures will serve as a hub for innovation and startups leading to development of new technologies and business opportunities as well as enable economic and social development in the region.

The primary purpose of the incubator, associated with the esteemed IIIT Sri City, is to encourage building the institutions' entrepreneurial spirit via utilizing its intellectual capital. Currently, Dr. G. Kannabiran, Director, IIIT Sri City and Shri M Balasubramaniam, Chairman, BoG-IIIT Sri City serve as the Directors of the company (CIEDI).

Gyan Circle Ventures located in IIIT Sri City provides valuable facilities to incubatees and startups. The incubatees of GCV gets access to

- Modern work space
- Communication facilities
- Computing facilities
- Equipment labs
- Library & information Centre
- Training and conference facilities

In addition, the incubatees can leverage the expertise of Mentors from both academia and the industry. Being an incubatee in a TBI which is a part of an esteemed high quality technical institution has additional perks. Startups need manpower and they have an opportunity to hire brilliant young minds from IIIT Sri City, either as interns or as full time employees.

Gyan Circle Ventures' proposal to function as a Technology Incubation and Development of Entrepreneurs (TIDE 2.0) incubation centre was approved by the Ministry of Information Technology (MeiTy). They have chosen and are funding GCV as a Group 2 Centre.

TIDE 2.0 by MeiTy was initiated to promote tech entrepreneurship through financial and technical support to incubators engaged in using emerging technologies such as IoT, AI, Block-chain, Robotics etc. in pre-identified areas of societal relevance.

The TIDE 2.0 center at Gyan Circle Ventures will provide support for innovators and startups, in various phases, via the two following programs.

Entrepreneur-In-Residence (EiR) Program

- An Entrepreneurs-in-Residence (EiR) is an individual(s)/ student(s)/ start-up who are ready to develop and validate their idea into a Proof-of-Concept (POC).
- They will work from GCV incubator space
- GCV TBI will support the idea development, validation and subsequent development of POC.
- A maximum up to Rs. 4 Lakhs will be provided to each EiR as Grant.

Grants Program

- Nascent start-ups with a definite Proof-of-Concept can be considered eligible for the grant. The grant is provided to create a Minimum Viable Product and to advance the start-up till Go-to-market stage.
- A maximum of up to Rs. 7 Lakhs may be provided to each start-up as Grant.
- GCV TBI will provide mentorship and guidance throughout the program.

As a part of it's 1st Cohort under MeitY TIDE 2.0 programme, GCV selected & funded 9 startups (8 Grants & 1 EiR) during the FY2020-21. The details of the startups are as follows:

SNo.	Startup/Company	Lead Innovator/CEO	Innovation Brief	Technologies	Application Domain
1	Rekindle Automations Pvt Ltd, Chennai	Radhakrishna n Jothiram	A Smart Intravenous Dripper System For Centralized Monitoring And Automatic Stopping Of Intravenous Fluid	AI	HealthCare
2	Hivericks Technologies, Chennai		Next Generation Of Smart Green Charging Solutions For Li-Ion Battery Devices	IoT	Smart Charging
3	Aqua Solutions, Krishna	Jogi Sai Prasanna	Aquaculture Smart Monitoring Systems for feeding & surveillance of aqua farms	ІоТ	Aquaculture
4	LSPoT PrevenTech, Erode	Sunil Vignesh	Intelligent Wearable Device to Retain and Maintain Human Posture	ML	Preventive HealthCare
5	MedCuore Medical Solutions, Chennai	Paul Pradeep J	Indoor Air Quality Monitoring and Purifying System using Hybrid Green Technology	IoT	Environment
6	Nandha Infotech, Coimbatore	Vigneshwara n T	SenSe Luto – Advanced Soil Monitoring & Crop Management System	IoT	Agriculture
7	Mellon Ai Pvt Ltd	Dr Masood Ikram	Capemo; Artificial Intelligent Camera	AI	Retail
8	EQUIZONE MEDITECH PRIVATE LIMITED	Rajanandhini. B	Negative Pressure Wound Therapy with Remote Monitoring	IoT	HealthCare
9	Hydrotribe Pvt Ltd	Tarun K Karanam	Automated and self Sustainable Aeroponic tower to cultivate organic vegetables at home	ΙοΤ	Hydroponics

Six of the above startups (Rekindle, Hivericks, Aqua, Hydrotribe, Nanda & Medcuore) have already graduated from the program. Medcuore Medical Solutions have also been selected for Investment scale-up of Rs.35 Lakhs under the TIDE 2.0 scheme by MeitY.

As a part of its 2nd Cohort, GCV selected & funded 9 startups (7 Grants & 2 EiR) during the FY 2021-22. The details of the startups are as follows:

S No	Name	Organization	Technologies	Sector
1	Megavaruman P	Magronic Contrivance Pvt Ltd	IoT/Robotics	Agriculture
2	Siva Nagaraju	FARMX INNOVATIONS PRIVATE LIMITED	ІоТ	Agriculture
3	Varshan Mohan	Pristyn Automations Private Limited	ML & IoT	Energy Sector
4	Vishnu Priya	Kratu Scientific Solutions LLP	MEMS	Healthcare
5	Akanshi Vaishya	WORKIFY	AI/ML, Robotics	Environment
6	Padmanabham K	Pavan Empower Solutions	ІоТ	Wearable Device
7	Abhishek Kaushal	Radiate Healthcare Innovations Pvt. Ltd.	AI & IoT	Healthcare
8	Raja Suresh	Ekalavya Innovative solutions Pvt. Ltd.	ІоТ	Advertisement
9	Manju Bhargavi	Elixir SensAI	AI & IoT	Healthcare