









# SPRINKLERS 11 October 2023

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one among 45 Indian Universities







SHANGHAI

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### Editorial Message

Education's purpose is to replace an empty mind with an open one.

- Malcolm Forbes



Dear Contemporaries!

Dear Contemporaries! Greetings from your Editor and Team. We take this opportunity to thank our devoted readers, highly innovative and talented contributors, expert team members and distinguished authorities for being a part of this highly sought after archived quarterly information of Smart Sprinklers Newsletter.

Decidedly, the past quarter have been characterized as being a notion of optimism and discovery akin to innovation and involvements. Truly, we enjoyed the remarkable optimism that is marked by return to normalcy of our daily routine and the opening

of lot of hackathons, associations, alumni meets, faculty development programs, societal activities, Research and developmental activities, new labs and new industry subject initiations, patent grants, faculty connect with industries, new projects and fundings, accreditation activities and more importantly our department's contribution in the process of teaching and learning subjects with high morale at par with higher learning institutions.

In passing, we strongly believe that creativity is the conception behind every innovation blossom from a tiny spark of knowledge which is spectacular in our department. We welcome in-person teaching with open arms. The optimism was also manifested by the community's participation in scientific events; including, meetings, forums and symposia. The participation of our students and faculty in national and international events as speakers, delegates and presenters made us to have cheer to climb high. Let us continue and do our part to encourage and support the regularity of our community in support of the training of our research scholars, students and staff.

As regards to the past quarter of events and discoveries, we enjoyed discoveries in interaction and interventions in the domain of Soft Computing, Green Computing, Multilingual Computing, theoretical Computing, Quantum Computing and Accelerated Computing. The spectacular social media highlights through our photographs and context becomes the shining stars of a glowing galaxy. A ship in port is safe, but that's not what ships are built for. ... Stay Tweaked! Interrelate with your feedback!

A ship in port is safe, but that's not what ships are built for. ... Stay Tweaked! Interrelate with your feedback!

Dr. B. Amutha

SoC-Newsletter—Head
Department of Computing Technologies



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## MESSAGE FROM HEAD OF THE DEPARTMENT



Dear Readers, Warm Greetings!

It brings me immense joy to connect with you through the latest Newsletter from the Department of Computing Technologies @ SRMIST-KTR, unveiling the 9<sup>th</sup> Quarterly Edition - "THE SMART SPRINKLERS" in October 2023 with yet another pile of milestones revolving around Academic standardisation to the international research arena.

In today's rapidly evolving global engineering landscape, our CTECH program stands as a cornerstone, equipping students to navigate the intricacies of survival through the technologies of Visual Computing, Multilingual Computing, Theoretical Computing, Quantum Computing, Green Computing and Accelerated Computing.

As the Head of this vibrant department, I wholeheartedly encourage the entire team to embark on this distinctive Teaching-Learning journey with state-of-the-art resources and a culture of collaboration to attain sustainable development goals. The Transformative Voyage is our motto to turn our dreams into tangible accomplishments and elevate the department to unparalleled heights of excellence.

Dr. M. Pushpalatha

Professor and Head
Department of Computing Technologies

Always seek out the seed of triumph in every adversity.

- Og Mandino.

#### ABOUT THE DEPARTMENT

The Department of Computing Technologies (CTECH) fosters the future of the computing world. The department's mission is to advance, evolve, and enhance Computer Science and Engineering fundamentals to build the intellectual capital of society. The CTECH Department endeavours to be an important regional, national, and international resource centre for the development of Computing and its applications. The department is excelling by keeping up the pace with recent trends and evidence of exponential and exhilarating growth. CTECH boasts a vibrant student fraternity including undergraduates, postgraduate students, research scholars, and a stellar faculty of professors.

#### Vision



To become a world class department in imparting high-quality knowledge and in providing students a unique learning and research experience in Computer Science and Engineering.

#### Mission



- ·To impart knowledge in cutting edge technologies on par with industrial standards.
- ·To collaborate with renowned academic institutions in research and development.
- ·To instill societal and ethical responsibilities in all professional activities.

#### Doctorate Dynamo: Fostering Academic Excellence

The years of hard work and dedication have finally resulted in the most significant fruit you have ever wanted. Many congratulations on your Ph.D. degree. Family of Computing Technologies wish that all the goals that you have set become more attainable, especially now that the biggest dream of your life has already come true. Best wishes for your achievements.

Dr. Revathi M Research Supervisor: Dr.V.V.Ramalingam

Title: Framework for Improving Security and Resilience of IoT Networks Using SD.

Dr. Rajalakshmi Research Supervisor: Dr Annapurani panaiyappan K

Title: A Robust Framework for Contactless Bi-Modal Palm Based Vascular (Vein) Pattern Recognition System Using CD-Net-SPOA Classifier

Dr. S. Girirajan Research Supervisor: Dr.A. Pandian

Title: An Efficient Acoustic Model with Enhanced Feature Extraction Technique for Automatic Tamil Speech Recognition

Dr. Briskilal J Research Supervisor: Dr.C.N. Subalalitha

Title: Detection and Classification of Multilingual Idiomatic Phrases Under Deep Learning Techniques

Dr. M. Vijayalakshmi Research Supervisor: Dr R I Minu

Title: Enhancing ETL Efficiency In Big Data Environment Using Dynamic Feature Analysis

Dr. V. Arulalan Research Supervisor: Dr. Dhananjay Kumar

**Title:** Deep Learning Based Methods for Improving Object Detection Classification and Tracking in Video Surveillance.

Dr. Joan S.Muthu Research Supervisor: Dr. P. Murali

Title: Novel Framework For Security Of DICOM File With JSMP Map.

Dr. Ajanthaa Lakkshmanan Research Supervisor: Dr.C.Anbu Ananth

Title: Segmentation and Classification of Pancreatic Tumor for Computed Tomography Images Using ML

**Techniques** 

Dr. S. Kiruthiga Devi Research Supervisor: Dr.C.N. Subalalitha

Title: DeVise: A Deep Learning Based Framework to Assist Visually Challenged People

Dr. Madhumitha Research Supervisor: Dr. N. Arulanand

Title: Static Localization and Compressive Sensing Method for Underwater Acoustic Sensor Networks

Dr. Madhura R Research Supervisor: Dr. Rhymend Uthariaraj

Title: Task Scheduling algorithms to optimize the schedule length of the applications in distributed

environment

#### New on Board

We are delighted to have you all among us. Our good wishes on becoming part of our enthusiastic team.



Dr. R. Indhumathi
Professor



**Dr. R. Rajmohan** Assistant Professor



**Mr. S. Prabu** Assistant Professor



Mrs. G. Rekha Assistant Professor(|r.G)



Mrs. M. Ramya Assistant Professor(Jr.G)



**Mrs. S. Poonkodi** Assistant Professor(Jr.G)



**Mr. M. Anand**Assistant Professor(Jr.G)



Ms. M. Janani, Assistant Professor(Jr.G)



Mr. P. S. Thanigaivelu Assistant Professor(Jr.G)



Mr. P. Thamizhikkavi Assistant Professor(|r.G)



Ms. Sornalakshmi Assistant Professor(Jr.G)

## SRMIST Signs MoU with Bureau of Indian Standards



The Memorandum of Understanding (MoU) was made on 4th August 2023 between the SRM Institute of Science and Technology and The Bureau of Indian Standards, the National Standards Body of India established under the Bureau of Indian Standards Act, 2016. The prime objective of the MoU is to develop collaborative activities in the areas of Standardization and Conformity Assessment based on equality and reciprocity. The MoU was signed by Prof S Ponnusamy, Registrar, SRM Institute of Science and Technology-KTR and Shri U S P Yadav, Scientist F & Deputy Director, General, Southern Region, Bureau of Indian Standards in the presence of Dr M Pushpalatha, Professor & Head, Dr M Eliazer, Assistant Professor, Dr N Arunachalam, Assistant Professor from Department of Computing Technologies, SRMIST, and Smt. G Bhavani, Scientist E / Director and Head, Chennai Branch Office, Bureau of Indian Standards

## Computing Technologies Achieves EOMS Certification on World Standards Day





On 13th October 2023, the Department of Computing Technologies, School of Computing, SRMIST-KTR was bestowed upon Educational Organisational Management Systems (EOMS) certification under IS/ISO 21001:2018 at Le Royal Meridien during the World Standard's Day Celebration. The Certification is a testament to the unwavering commitment towards quality redressal for Teaching-learning, Research, Industrial Collaborations, Infrastructure and Placement Processes.

## Celebrating Engineering Excellence: IE(I) Student Local Chapter - Engineer's Day Event



The IE(I) Kattankulathur Local Chapter celebrated the 56th Engineer's Day on September 15, 2023, and honoured the chapters for their achievements from May 20, 2022, to April 20, 2023. The Department of Computing Technologies, School of Computing, won the "Best Student Chapter Award" and twelve prizes for other categories. The event also acknowledged the efforts of student organizers, including Mr. Aman Ali Khan, Mr. Pradipta Nandi, Ms. Rakshanna, Mr. Hemanth, Ms. Kousika, and Ms. Yukta Kulkarni.

## Memorandum of Agreement (MoA) Signed with Universitas Airlangga, Indonesia



A Memorandum of Agreement (MoA) was made on 16<sup>th</sup> August 2023 formalizing research collaboration between the Centre for Patient Safety Research at Universitas Airlangga, Indonesia, and SRM Institute of Science and Technology, India at the SRMIST, KTR Campus. The MoA was signed by Dr G Niranjana Professor, Department of Computing Technologies, SRMIST and Dr Inge Dhamanti from Universitas Airlangga, Indonesia in the presence of Prof Dr Revathi Venkatraman, Chairperson, School of Computing, SRMIST-KTR & Prof Dr M Pushpalatha, Head, Department of Computing Technologies, SRMIST-KTR. The MoA was initiated by Dr G Niranjana as a part of the DST-SERB-funded project and collaborating International Co-Principal Investigators therein.

## Reaching the Pinnacle: Among the Top 2% of Scientists Worldwide by Stanford University



**Dr. Subalalitha C.N.** Associate Professor is being recognised as one of the world's top 2% of scientists in the subdomain of "Artificial Intelligence and Image Processing" for 2022, as released by Elsevier BV (Elsevier - Stanford University initiative). She is being ranked 1,32,992 .She is one among the 27 faculty members from SRMIST group of Institutions.

Dr.Subalalitha C.N has been awarded as "First Generation Entrepreneur", organized by mySBA and Software Technology Park of India, Taramani Chennai on 20th august, 2023.

## Congratulations to Dr. Kavisankar on Postdoctoral Fellowship at IIIT Allahabad



We are thrilled to announce that Dr. Kavisankar has been selected as a Postdoctoral Fellow at IIIT Allahabad, where he will work alongside Professor Dr. S. Venkatesan. This prestigious appointment is in connection with an IIT Kanpur-sponsored research project. Dr. Kavisankar's dedication and expertise have earned him this remarkable opportunity, and we extend our heartfelt congratulations to him.

## Dr. Srinivasan Embarks on Research Endeavour at National University of Singapore



We are delighted to share that Dr. Srinivasan will embark on a six-month journey as a Visiting Researcher at the National University of Singapore. During his tenure, he will collaborate under the mentorship of Emeritus Professor Ling Tok Wang, who was honoured as the keynote speaker at the ICIOT Conference 2023 in India. Dr. Srinivasan's dedication and hard work have led to this prestigious opportunity, and we applaud him for his continuous efforts. We wish him every success in all his forthcoming endeavours.

#### Soumil Saumyendu Bhattacharya Lands 40 Lakhs PA Job at Factwise



We're deligted that Soumil Saumyendu Bhattacharya has secured a prestigious role at Factwise, commanding a remarkable 40 Lakhs INR annual salary. Soumil's triumph exemplifies dedication and excellence. Congratulations!

#### Bansod Malvika Prabodh - The Youngest Shuttler Honored with Chatrapati Shivaji Award



In a momentous achievement, Bansod Malvika Prabodh, a final year student from CSE J2 Section, was conferred with the prestigious Shiv Chhatrapati Award on August 28, 2023. This esteemed accolade, named after the legendary Maratha King Chatrapati Shivaji Maharaj, is the highest sporting honour in the Maharashtra State. Malvika's remarkable dedication and talent in badminton have made her the youngest shuttler to receive this accolade but also brought great pride to her academic institution and the entire state.

#### "Quantum Triumph: A Journey from the Barclays Data Stellar Hackathon to a Bright Future

Participating in the Barclays Data Stellar Hackathon in 2023 was an unforgettable experience. Our team's project on Data Protection through Quantum Key Distribution won two first-place victories, and we were recognized as one of the top three finalists by HackerEarth and Barclays. We presented our project to Mr. Craig Bright, Group Chief Information Officer of Barclays, and Mr. Praveen Kumar, CEO of Barclays India, who were impressed by our work. We owe our success to the support and opportunities provided by SRMIST's management and our Head of Department, Dr. Puspalatha M. The invaluable experience gained at SRMIST's Qkrishi Centre of Excellence in Quantum Information and Computing, known as "SQ|QuIC," was pivotal to our success. We are grateful for the guidance and mentorship of our quantum lab leaders, Dr. Kavisankar and Dr. Gayathri M, and our academic and faculty advisors. We are excited about the offer from Barclays, which includes a generous package of 15 lakhs. This victory is a testament to the potential of our young minds and the quality of education provided at SRMIST.

NamanKaushi RA2011003010993 Sajidullah Ansari RA2011003011028



Currently in Taiwan! My TEEP@AsiaPlus internship at the National Chung Cheng University, Taiwan is in full swing, and I'd like to express my sincere appreciation to the Department of Computing Technologies, SOC, SRMIST, as well as my dedicated faculty mentors and coordinators

Harshith Gupta - IV Yr



Huge thanks to the Department of Computing Technologies, SOC, SRMIST for enabling my on-campus AI-powered cardiac research at IIT Hyderabad. Your support fuels groundbreaking discoveries

Vikash - IV Yr

SRM Institute of Science and Technology played a vital role in my path to MITACS at McGill University. Their consistent support and the various opportunities they provided, including valuable research experiences like the Samsung Prism internship, significantly strengthened my qualifications. The timely Letters of Recommendation from dedicated faculty members played a pivotal role in securing this unique opportunity. Additionally, my innovative project, developed during a hackathon hosted by SRM and aimed at assisting individuals with disabilities, emerged as a critical highlight in my MITACS interview. SRM's invaluable guidance and the opportunities they offered, combined with my prior research background, have played a pivotal role in shaping my academic and professional journey, ultimately leading to this prestigious achievement.

Satvik Kumar - IV Yr



#### **CONNECTED TRACKS**

**Empowering Railways Through Innovative IoT Rake Monitoring** 



I'm immensely grateful for the invaluable support from the CTECH department while developing our real-time rake monitoring system for trains. With the guidance of Sridhar Sir and the dedication of our project guides Muruganandham Sir, Senthil Sir, and Narayanamoorthi Sir, our team successfully created an IoT-based solution for AC EMUs. This innovative system enabled real-time monitoring of performance parameters, proactive fault detection, and enhanced maintenance practices, significantly improving train operations' efficiency and reliability. Their unwavering support and expertise were crucial in shaping my learning experience and achieving our goals.

RA2011003010048



#### **ILLUMINATE**

**Empowering Railways with EMU IoT Innovations** 

Engaging in the EMU IoT project was both challenging and enriching. I'm thankfultotheCTECHdepartmentandourprojectguides, Muruganandham Sir, Senthil Sir, and Narayanamoorthi Sir, for their unwavering support. This hands-on experience deepened my understanding of IoT and software development. Our team developed a tailored IoT solution for AC EMUs, enabling real-time performance monitoring and efficient fault detection. Collaborating with skilled engineers was a privilege, and their dedication added immense value. I appreciate the department's and guides' commitment to ensuring the success of our venture.



JOEL SANTOSH GEORGE RA2011003010051



#### IOT TRACKS OF SUCCESS

Navigating the EMU Monitoring Journey in Tambaram



Working on the IoT rake monitoring system for EMUs in Tambaram was incredibly rewarding. Thanks to the unwavering support of the CTECH department, college, and my project guides— Muruganandham Sir, Senthil Sir, and Narayanamoorthi Sir—I deepened my IoT and software development knowledge. This project honed my teamwork, problemsolving, and communication with fellow skilled engineers. I'm genuinely thankful for this opportunity, as it equipped me with valuable skills, making me a more proficient engineer.

BHAVANSH GALI RA2011003010019

#### Alumni Testimonials

I am proud to be a 2014 batch SRM alumnus from the Computer Science and Engineering department. My time at SRM was nothing short of exceptional. The learning experience was truly enriching, thanks to the dedicated and knowledgeable faculty members. The high-tech labs provided an excellent environment for research and development, fostering innovation and creativity.

One of the standout aspects was the outstanding placement opportunities. SRM's strong industry connections opened doors to promising career prospects. Beyond academics, SRM offered a vibrant atmosphere for extracurricular activities, adding a delightful balance to our education journey. The camaraderie and fun-filled moments with fellow students are cherished memories.

Sweta Tiwari 2014 Batch



Graduating in 2018 with a bachelor's in computer science, I can confidently say that the quality of education at SRM is exceptional, and the supportive faculty played a pivotal role in my success. The practical projects I undertook during my time there continue to benefit my career to this day. I am extremely proud to have been a part of this institution.

Overall, SRM was more than just an educational institution; it was a place where dreams took shape. It provided the perfect platform to learn, grow, and lay the foundation for a successful future. I am grateful for my time at SRM and the invaluable experiences it bestowed upon me.

Vaibhav Sharma Technical Writer-LOC Software

Being an alumnus of SRM was an enriching experience. The college's dedicated faculty, practical curriculum, and vibrant campus life provided a well-rounded education. The support from career services and alumni network played a significant role in shaping my professional journey. My relationship with faculty members was more than just academic; it was built on mentorship and guidance. They played a significant role in my personal and professional growth, always ready to provide insights and support.

To sum up, SRM is an abode of memories and a cornerstone in my journey of self-discovery and achievement. I left not just with a degree but as a well-rounded individual.

Binti Deka

2013-17 Batch- IIT Kozhicode(Pursuing)



#### Fresher's Testimonials



Our college campus offers various sports facilities to cater to diverse student interests. The state-of-the art Sports Complex includes a fully equipped gym, indoor courts for basketball, volleyball, and badminton, and an indoor swimming pool. Outdoors, we have soccer, cricket, tennis, and basketball courts, a running track, and athletic fields. Additionally, there are yoga and aerobics studios for holistic well-being. These facilities reflect our college's commitment to promoting physical fitness, fostering a sense of community, and ensuring an active campus life for all students

Dhyanesh Visakan RA2311003010982



#### Fresher's Testimonials

"Unveiling Horizons: A Freshman's Journey into Innovation at SRMIST"

Being a fresher at SRMIST has been exhilarating. The nurturing environment and cutting-edge curriculum exceeded my expectations. Faculty members are mentors, always ready to help. State-of-theart labs provided hands-on experience, applying theory to practice. Emphasis on projects and coding competitions enhanced my problemsolving skills and confidence. SRMIST's vibrant student community fosters innovation through collaborative projects and hackathons. Seminars by industry experts offered valuable insights into Computer Science trends. My journey here has transformed me, enriching my technical knowledge and sparking curiosity. Exciting opportunities await, and I look forward to continuous growth and learning.

Shourya Thakur RA2311003011003

#### Student Achievements

#### **Academic** Achievements



Tuhina Tripathi, RA2211003010423 from CSE G1 section, delivered a technical abstract presentation and won a cash prize of 2000 rupees. This remarkable achievement took place during the prestigious 56<sup>th</sup> Engineer's Day celebration on September 15 <sup>th</sup>, 2023, hosted by the Institution of Engineers India, Kattankulathur Local Centre. Tuhina and her team, including Manya Mehrotra, P Karthik Manikantan, and faculty member Madhumitha Kulandaivel, participated in this intercollegiate competition

Tuhina Tripathi, RA2211003010423, a student from Second Year CSE G1 section, participated in the bootcamp at Google office in Hyderabad, enhancing her software engineering skills. She has been selected as one of the top 200 students from the pool of 55,000+ applicants.



Mr. Ritam Biswas, RA2111003010129 from III Year CSE B1 Section has won the 3rd prize in the Hackathon OSSome Hacks, organized by SRM GitHub Community on 15<sup>th</sup> & 16<sup>th</sup> Sep 2023.

Shishagra Nigam, RA2211003010409 and ANJALI K S, RA2211003010397 of second year CSE G1 section, applied for the Microsoft Learn Student Ambassadors during March and become the student Ambassador during August and advanced their milestones to Alpha.



Ujan Pradhan, RA2211003010446 and Tuhina Tripathi, RA2211003010423 from second year CSE G1 Section, got selected for Summer Internship at Social Summer Code Season 2. It is an open-source program and they have worked on various projects based on Web Development.

Vishal Khumar P D, RA2111003010667 (J1-Section), Ganesh K, RA2111003010298 (E1-Section), Rajvignesh B.S, RA2111003010313 (E1-Section), The team titled "SONIC BOOMS" from Third Year CSE secured first place in the hackathon SCRIPT SONIC conducted by NWC, SRMIST KTR.



Nikhil, RA2111003010984 from Third Year CSE A2 Section secured Second Prize in Code Fest 2023, conducted by NWC Association in collaboration with Newton School Coding Club SRM on 2<sup>nd</sup> August 2023. As a token of appreciation, he received a cash prize of Rs. 3000/-.



Kartavya Shah, from Third CSE D2 section, secured second prize for the project titled "Revolutionizing EV Charging" along with mentor Dr. J. Ramaprabha, In IoT ProjectExpo2023 conducted by the Department of Computing Technologies, SRMIST.

#### Mon-Academic Achievements

Shrimayee Dutta, from Third CSE I1 Section, won first prize in the Ossome hacks hackathon contest.

Girish Ranjan, RA2311003010761 and Tanmay Sai Gupta, RA2311003010749 completed ESP EXPLORE: A Hands on IoT WORKSHOP SRM on 7<sup>th</sup> -8<sup>th</sup> September 2023.

A team of students, DEVANSHI AGRAWAL (RA2311003010075), RICHANG CHAUDHARY (RA2311003010141), ANISH KUMAR PANDEY (RA2311003010094), AKSHIT OHRI (RA2311003010138) from 1st Year CSE B1 section own 3rd position along with cash prize Rs.10000 in Digizest 1.0 technical hackathon, organized by Department of Computing Technologies, School of Computing, SRMIST.

A team of students Varsha Gupta (RA2311003010133), Mridangam Goswami (RA2311003010082), Arush Jauhari (RA2311003010080) from 1<sup>st</sup> Year CSE B1 section participated in Digizest 1.0 technical hackathon held on 7<sup>th</sup> and 8<sup>th</sup> September 2023. Organized by Department of Computing Technologies, School of Computing, SRMIST.

Faiyaz Hussain H (RA2311003011683) from 1<sup>st</sup> Year H2 section and Vijay Bala Mahalingam (RA2311003010079) from 1<sup>st</sup> Year B1 section secured 2<sup>nd</sup> place with cash prize of Rs.8000/- in 24-hour hackathon held on 8<sup>th</sup> and 9<sup>th</sup> September, conducted by SRM Valliammai Engineering College.

SAMRUDDHI TIGGAONKAR (RA2111003010576) won first position along with cash prize Rs.50,000 in hack summit 4.0 hackathon organized by AARUSH'23

SHRIMAYEE DATTA (RA2111003010555) won first prize in the hackathon OSSome Hacks organized by GitHub Community SRM on 15<sup>th</sup> -16<sup>th</sup> September 2023.

Dev Bhatia participated in Ctrl + Create Epic Adventures in Game Development Workshop conducted by AARUUSH on 8th and 9th September 2023 in collaboration with Unreal Engine and Monolith

R. Gokul, RA2111003011019, from III-year A2 section has been chosen to represent the Indian Roller-Skating Team. He has also been selected to participate in the 19th Asian Roller-Skating Championship scheduled to take place in China from October 18<sup>th</sup> to 28<sup>th</sup>, 2023.

Ms. Dimpy Singh (RA2111003010105) and Anuj Jha (RA2111003010119) from III Year B1 Section have participated and Won 2<sup>nd</sup> Place in the HackBytes II held online on 1<sup>st</sup> July 2023.

Shyam Kaarthikeyan - RA2211003011237 from Second Year CSE C2 section, completed a 3-month game development internship at HoneyBadgersCo.

Tejaswini Rajesh - RA2011003010503 from CSE H1 section, Dhruvil Patel RA2011003010559 from CSE I1 section along with their team titled "Mavericks" won 2<sup>nd</sup> Runner Up position along with a cash prize of 25k in HackRx 4.0 by Bajaj Finserv in Pune at Symbiosis Institute of Technology.

SHIVANSH - RA2111003010243, TAUTIK AGRAHAR - RA2111003010259, ASHISH KUMAR - RA2111003010502, NANDINI AGRAWAL - RA2111003010861 and ALOK KUMAR VERMA - RA2111003010917, from third year CSE got an internship offer in BYN Mellon with stipend of 75k per month.

Hardik Malani - RA2211003010334 from II Year CSE F1 Section won an International Hackathon named "Fantom Hackathon Q2 2023" hosted on DevPost. His Team made a web3 Mental Health project named "InnerSerenity ~ Fantom × AWS Empowering Inner Peace" which focuses on Prioritizing Mental Health. This team was rewarded with 5000\$ in AWS Credits and got AWS Honorable Mentions".

SRMIST, KTR Campus, Quantathon 1.0 was organised by the Department of Computing Technologies in association with Qkrishi, Bosonq PSI, Quentangle and Myquantum Technologies on Aug 18<sup>th</sup> and Aug 19<sup>th</sup> 2023. Quantathon 1.0 was a 24 hour event. Shortlisted 30 teams participated in Quantathon 1.0, Cash Price: 1st price- 10K, 2nd price-6K, 3nd Price-4K

Shreya Agarwal from II Year CSE, got runner-up in the 2<sup>nd</sup> Madhya Pradesh rollball league held in Indore, Madhya Pradesh organized by Indore rollball association and Madhya Pradesh rollball association in the guidance of Rollball Federation of India from 17<sup>th</sup> to 19<sup>th</sup> August 2023. She was awarded a cash prize of Rs. 30,000 and also felicitated with Best Goal Keeper of the tournament with Rs. 10000 and trophy.

#### Fresher's Enigma

The SRMMUN Team, represented by Swayam Krishnan and Ashwamedh, participated in the inaugural HITS Model United Nations event from September 8<sup>th</sup> to 10<sup>th</sup>,2023 the SRMMUN team emerged as the winner, securing the Best College Award.



Swayam Krishnan, RA2311003010064, received the Certificate of Excellence for achieving the title of Best Delegate in the WHO committee.

Devanshi Agrawal (RA2311003010075), Vijay Bala Mahalingam (RA2311003010079), Anish Kumarpandey (RA2311003010094), Akshit Ohri (RA2311003010138), Richang Chaudhary (RA2311003010141), and Faiyaz Hussain (RA2311003011683) received a cash prize of 8000 rupees for their performance in the National-level Hackathon (Hack-A-Tank) conducted at SRM Valliammai Engineering College from September 8<sup>th</sup> to 9<sup>th</sup>, 2023.





Manish Anto Cristiano (RA2311003010682) attained the Bronze Medal in the Blitz event at the Asian Junior Chess Championship 2023 in Jamshedpur. Furthermore, he secured the Silver Medal at the National Junior Chess Championship 2023 in Ahmedabad.

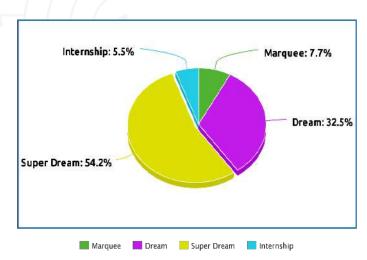
#### Career News

The placement season for the batch of 2020-24 has commenced with our undergraduate students actively participating. Reputed companies have visited SRMIST to conduct recruitment processes and extend placement and Internship offers to our students.

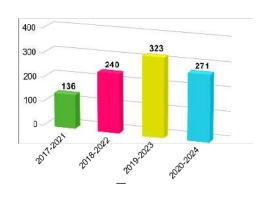
Placement metrics are established to empower students with valuable information and guide them in enhancing their skills for their career, educational, and professional development.

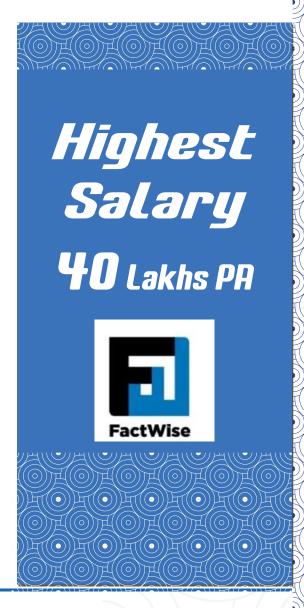
Faculty advisors organize weekly career talks to motivate students and facilitate their success in placements. Invited speakers, including industrial experts and alumni, share insights to help students navigate the placement process more effectively.

#### Offers Under Various Categories



#### Comparison for Last 4 Years





#### **MARQUEE PLACED STUDENTS**



RIYA SISODIA (RA2011003010418) ARM EMBEDDED CTC: 34.21 LPA



AbhroKumar Roy (RA2011003010817) ORACLE CTC: 30.5 LPA



TanishqKashyap (RA2011003011104) ORACLE CTC: 30.5 LPA



Rishu Shukla (RA2011003010047) JUNGLEE GAMES CTC: 23 LPA



RIYA SISODIA (RA2011003010418) WELLS FARGO CTC: 24 LPA



AFRAZ TANVIR (RA2011003010499) WELLS FARGO CTC: 24 LPA



ROHAN R MAHISHI (RA2011003010801) WELLS FARGO CTC: 24 LPA



PRIYAL MITTAL (RA2011003010933) WELLS FARGO CTC: 24 LPA



HEMALATHA T (RA2011003010107) WELLS FARGO CTC: 24 LPA



SINEHA S (RA201100301123) WELLS FARGO CTC: 24 LPA



AAYUSHI (RA2011003011380) WELLS FARGO CTC: 24 LPA



VIRAJ AGARWAL (RA2011003010262) WELLS FARGO CTC: 24 LPA



DIYA VIJAY ROY (RA2011003010310) WELLS FARGO CTC: 24 LPA



Sneha J S (RA2011003010445) BNY MELLON CTC: 21.64 LPA



Surabhi Thakur (RA2011003011077) BNY MELLON CTC: 21.64 LPA



Abhishek Biswas (RA2011003010029) BNY MELLON CTC: 21.64 LPA



TrayiKashyapSheraphy (RA2011003010162) BNY MELLON CTC: 21.64 LPA



SonakshiMugrai (RA2011003010110) JP MORGAN CTC: 20 LPA



KHUSHI SURI (RA2011003010129) JP MORGAN CTC: 20LPA



OJAS SINHA (RA2011003010043) FARMAKO CTC: 20 LPA

#### Notable Internship Achievements



Abhinav Shankar H (RA2111003010774)

ABHINAV SHANKAR H RA2111003010774) had the privilege of undertaking a two-month Summer Research Fellowship at CSIR-NPL (National Physical Laboratory) in Delhi, generously funded by the esteemed Indian Academy of Sciences (IAS). During this enriching experience, he dedicated with great efforts to a fascinating project titled 'LabView Automation on Primary Thermometry,' culminating in the submission of a comprehensive thesis.

| Company Name         | Count |
|----------------------|-------|
| BNY Mellon           | 7     |
| Natwest              | 1     |
| JP Morgan            | 22    |
| Wells fargo          | 6     |
| Fidelity             | 16    |
| Barclays             | 4     |
| Microsoft(Acon Role) | 2     |
| Microsoft(PJM Role)  | 2     |
| Western Digital      | 1     |

## Faculty Achievements

#### **Patent Published**

Dr.AjanthaaLakkshmanan, Dr.V.S.Saranya, Dr.R.Madhura, Dr.K.T.Meenaabarna, K.Sudhakar, have published a patent under title "Cephalometric Analysis for finding facial Growth Abnormalities", Indian Patent Field, 08.9.2023

Dr. M. Kandan et al., Assistant Professor, have published a patent on the title "Implementation of Deep Learning Models For Automatic Insect Detection and Improve Crop Yield", Intellectual Property India,

#### **Patent Granted**

Dr. Aswathy Cherian, Dr. E. Poovammal has granted a patent titled "A Vehicle Number Plate Detection System and a Method Thereof" on 25.08.2023.

Aditi, Dr.E.Poovammal has granted a patent titled "Smart Eyewear and a Method Thereof" on 18.08.2023.

Dr. Arul Prakash was granted a patent titled, "A System And Method for a QR Scanner Based Vehicle Ride-Sharing System" on 27.09.2023.

Dr.Arul Prakash was granted a design patent titled, "Agriculture Drone for Crop Health Monitoring" on 27.09.2023.

Mrs. S. Raveena, Dr. R. Deepa, Mr. T. Dhamothara Kannan, and Mrs. C. Suganthini received a Certificate of Registration of Design with the title "AGRICULTURE DRONE FOR CROP HEALTH MONITORING" from The Patent Office, Govt. of India.

Dr. M. Anousouya Devi, Dr. S. Abijah Roseline, Dr. S. Nikkath Bushra, and R. Madhura received a Certificate of Registration of Design with the title "WEARABLE ELECTRONIC DEVICE FOR BLINDS" from

#### **Funding Granted**

Dr. Minu and Dr. M.Suganiya have received ATAL fund of Rs 3.5 lakhs to conduct FDP on "Precision health technology"

#### **MoU Signed**

Dr.R.K.Pongiannam, Dr.S.Padmini and Dr.R.Brinda has signed a MoU between SRM Institute of Science and Technology and The Ministry of Skill Development & Entrepreneurship (MSDE), Govt. of India, a flagship skill development scheme of Government of India - Pradhan Mantri Kaushal VikasYojana 4.0 (PMKVY 4.0).

Dr. M. Suganiya, Dr. C. Jothi Kumar, Dr. V. Deepan Chakravarthy have initiated MoU and signed between SRMIST and Datayaan Solutions Private Limited.

#### **Journal Publication**

Padmini et.al "Performance studies of a solar thermal-electric hybrid desalination system: 4E (energy-exergy-economics-enviro economics) analysis." Environmental Science and Pollution Research 527 (2023): pg1-18 (SCI Indexed; **IF: 5.19**).

Padmini et.al have published a paper on "Distribution load flow analysis in a microgrid ,AIP Conf. Proc. 2852, 130014 (31st August 2023-First online available).

Padmini, et.al have published a paper on "Sensor enabled data analytics for an air conditioner waste heat recovery system, AIP Conf. Proc. 2852, 130007 (2023) (31st August 2023-First online available).

- K. Padmanaban, A. Sathiya, K. Jeevitha and R. A. A. Rosaline; Human-Computer Interface Challenges in Mobile Data Mining; 2023 International Conference on Sustainable Computing and Smart Systems (ICSCSS), Coimbatore, India, 2023, pp. 1661-1666, doi: 10.1109/ICSCSS57650.2023.10169161.
- R. AntoArockia Rosaline, Ponnuviji N.P., Subbu Lakshmi T.C., Manisha G.,"Enhancing lifestyle and health monitoring of elderly populations using CSA-TkELM classifier", Knowledge-Based Systems, Volume 276, 2023, 110758, ISSN 0950-7051,https://doi.org/10.1016/j.knosys.2023.110758.

Dr.M.Karthikeyan Assistant Professor has published an article titled" YOLO Apple: Augment Yolov3 deep learning algorithm for apple fruit quality detection" Signals, Image and Video Processing, SCI indexed journal, **IF:2.3**, August 2023.

Dr. M. Kanchana&S.V.Sugin published a paper titled, "Improved Cyber Attack Detection Using MLB-FQS: A Novel Modified Lagrange Butterfly-based Fuzzy Quasi-Linear SVM Algorithm", IETE Journal of Research, Taylor Francis, doi.org/10.1080/03772063.2023.2230172,2023 (IP /SNIP:2.33 / 0.714).

Sreemathy, J., Arun, A., Aruna, M., P. Vigneshwaran. (2023) "An Optimal Approach to Detect Retinal Diseases by Performing Segmentation of Retinal Blood Vessels Using Image Processing", Soft Computing 27, 10999–11011 (2023). https://doi.org/10.1007/s00500-023-08526-wG Accepted 14<sup>th</sup> May 2023, Published 05 June 2023, Issue Date August 2023.

- K. S. Jishnu and B. Arthi, "Enhanced Phishing URL Detection Using Leveraging BERT with Additional URL Feature Extraction," 2023 5<sup>th</sup> International Conference on Inventive Research in Computing Applications, IEEE Xplore, 2023.
- M. Bhanumathi and B. Arthi, "Designing a Heuristic Based Hybrid CNN with Attention Mechanism for the Effective Classification of Fish Species," 2023 5th International Conference on Inventive Research in Computing Applications, IEEE Xplore, 2023.

Devipriya, A., Prabakar, D., Singh, L, "Machine Learning-Driven Pedestrian Detection and Classification for Electric Vehicles: Integrating Bayesian Component Network Analysis and Reinforcement Region-Based Convolutional Neural Networks", SIVIP 17, 4475—4483 (2023). https://doi.org/10.1007/s11760-023-02681-1..

Arulkumar V, Vinod D, Devipriya A, ChemmalarSelvi G, SurendranS "Monitoring and Recognition of Heart Health using Heartbeat Classification with Deep Learning and IoT", Journal of Machine and Computing 3(3) (2023), DOI: https://doi.org/10.53759/7669/jmc202303028.

#### FDP/Worshop/Seminar Attended

Dr.R.AntoArockia Rosaline completed Al Applications in People Management, an online non-credit course authorized by the University of Pennsylvania and offered through Coursera in July 2023.

Dr.R.AntoArockia Rosaline received the certificate of completion for successfully completing and being eligible to take Design Thinking Course for the students of SRMIST on 11th July 2023.

Dr.R.AntoArockia Rosaline handled a session during the 5-DAYS Faculty Development Programme on "Programming for Problem Solving (21CSS101])" at SRMIST.

Dr.R.AntoArockia Rosaline attended the one-week workshop on Evolving potentials in quantum Computing applications from 11<sup>th</sup> sep 2023 to 15<sup>th</sup> Sept 2023 Organized by Theoretical Computer Science Research Group at SRMIST.

Dr. M.Karthikeyan, Assistant Professor and Dr. M. Kowsigan, Associate Professor and Dr. M. Kanchana, Associate Professor have been certified with excellence by CSEDU IIIT Delhi for the Faculty Development Course Module: Effective Teaching of Compiler Design from 13<sup>th</sup> to 17<sup>th</sup> July 2023.

Dr.M.Kandan, Assistant Professor, have completed the 6-days FDP on the theme "Data Science Tools and Applications" Organized by the Department of Data Science and Business Systems, S R M Institute of Science and Technology, Kattankulathur from 17<sup>th</sup> to 22<sup>th</sup> July 2023.

Dr.M.Kandan, Assistant Professor, have completed UGC & NEP recommended 16 days of training on "Faculty Induction Training Programme" Organized by the Directorate of Learning & Development, S R M Institute of Science and Technology, Kattankulathur on 2<sup>nd</sup> August 2023.

Dr.M.Kandan, Assistant Professor, has successfully completed the 5-days FDP on "Evolving Potentials in Quantum Computing Applications" Organized by Theoretical Computer Science Research Vertical, Department of Computing Technologies, S R M Institute of Science and Technology, Kattankulathur from 11<sup>th</sup> to 15<sup>th</sup> September 2023.

Dr.S.Padmini, Associate Professor has attended the Six Days Faculty Development Programme on Machine Intelligence and Futuristic Research Directions organized by Department of Data Science and Business Systems, SRMIST, Kattankulathur, September 04<sup>th</sup> September 2023.

Dr.S.Padmini, Associate Professor has attended the Five Days National Workshop on Data Analytics and Machine Learning (A Hands-on Approach) organized by SRM-ASI Student chapter, Department of Computing Technologies, S R M Institute of Science and Technology, Kattankulathur 21<sup>th</sup> to 25<sup>th</sup> August 2023.

Dr.B.Amutha has participated in the Six Days Faculty Development Programme on Data Science tools and Applications organized by Department of DSBS ,SRMIST from 17<sup>th</sup> to 22<sup>nd</sup> July 2023.

Dr P. Saravanan participated in a two-day workshop on Introduction to Embedded Systems & Robotics on 22<sup>nd</sup> & 23<sup>rd</sup> Sep 2023 at Adhiparasakthi Engineering College, Melmaruvathur in Association with e-Yantra, IIT Mumbai.

Dr M Suchithra, Associate Professor, participated in the 2023 IEEE CIS Summer School on Computational Advances in Deep Learning and Applications (CADLA) 17-21 July 2023, IIIT Allahabad, Prayagraj, INDIA.

Dr M Suchithra & Dr B. Kanisha, Associate Professors attended IBM SKills Build Physical Build-a-thon: Cyber Security & SIEM Powered by QRadar 31 st July - 4th August 2023

Dr.B.Amutha has attended five days National Workshop on Data Analytics & Machine Learning organized by SRM-ASI Student Chapter, Dept. of CTECH, SRMIST from 21.8.23 to 25.8.23.

Dr. Aruna M & Dr. Arthi B participated in the 21-day International FDP on "Data Science Tools", conducted by SRM IST, Tiruchirappalli Campus from 12<sup>th</sup> July to 1<sup>st</sup> Aug 2023.

Dr.A.Devipriya received the certificate for completing and being eligible to take Design Thinking Course for the students of SRMIST on July 11<sup>th</sup> 2023.

Dr.A.Devipriya completed "Al Applications in People Management" an online non-credit course authorized by the University of Pennsylvania and offered through Coursera in July 2023.

Dr.A.Devipriya attended the one week workshop on "Evolving Potentials in Quantum Computing Applications" from 11<sup>th</sup> September 2023 to 15<sup>th</sup> September 2023 Organized by Theoretical Computer Science Research Group at SRMIST.

#### **Faculty External Activities**

Dr.M. Kanchana, Associate Professor, received a Reviewer Recognition Certificate from Biomedical Signal Processing and Control Journal.

Dr.R.AntoArockia Rosaline served as a Reviewer in the Journal of Information and Knowledge Management.

Dr. Madhumitha Kulandaivel was awarded with "Best Technical Abstract" in Engineers Day, SRMIST, KTR on 15<sup>th</sup> September 2023.

Dr.Subalalitha C.N and Dr.Briskilal J juried a Project Expo for School students on 4.08.2023 organized by MTS India section and Dept of EEE, SRMIST, KTR.

Dr.Subalalitha C.N delivered a Seminar on the topic," Python Foundations with Hands on "for Non-CSE Faculty members, on 31.07.2023 in the Dept of Computing Technologies .

#### **Book Chapter**

S. K. Geetha, Rajasekaran Thangaraj, A. Devipriya, J. K. Kiruthika, M. Naveenkumar "Futuristic Adoption of Blockchain Technology in the Smart Agriculture and Food Industry: Basic Concepts, Structure, Characteristics, Applicabilities", Contemporary Developments in Agricultural Cyber-Physical Systems, (2023) DOI: 10.4018/978-1-6684-7879-0.ch007

"The future belongs to those who believe in the beauty of their dreams."

-Eleanor Roosevelt

#### **DOMAIN VERTICALS**

## **Quantum Computing**

Incharge: Dr. M. Pushpalatha



This Lab aims to support the India's national Mission on quantum and bring SRMIST as one of the leading hubs for quantum Technologies across India. The Vision is to revolutionize computations by usage of quantum computers with various algorithms to solve intractable problems, achieving quantum supremacy. Mission is to seed, nurture and scale up the research and development activities in the quantum ecosystem

#### **Upskilling Activities**

Dr.Thilagavathy.R has completed a 7 week course titled" Introduction to Quantum Information" on coursera.

Dr. Usha G has completed a course "Advanced Math for Quantum Computing" on the Udemy Platform.

Dr. Nalini. S has participated in IBM Summer School 2023. (2 weeks).

Dr.Nalini, Dr.Thilagavathy.R, Dr.Ramesh.S, Dr.Bibin Christopher, Dr.Ramya, Dr.U.Karthikeyan and Dr.Sworna Kokila attended five days FDP on "Evolving Potentials in Quantum Computing Applications" @ SRM Institute of Science and Technology.

Dr.Bibin Christopher hasompleted a course "The Complete Quantum Computing Course" on the Udemy platform.

Dr.M.LSwornaKokila has completed a course "The Complete Quantum Computing Course" on the Udemy platform.

Dr.G.K.Sandhia has completed a course "Quantum Computing Fundamentals with Microsoft Azure Quantum" on the udemy platform.

#### **Book Chapter**

Dr.Usha, Dr.G.K.Sandhia, Dr.M.Gayathri, Dr.M.Pushpalatha, Dr.Thilagavathy and Dr.P.C .Karthik has been accepted five abstract proposals on titled "Principles and Applications of Quantum Computing" by IGI Global Publications.

#### **Resource Person for FDP**

Dr. Gayathri M conducted a two-day "Qiskit" session during the outreach program at Panimalar Engineering College. Additionally, she led a hands-on workshop on "Qiskit" as part of the "Faculty Development Program on Evolving Potentials in Quantum Computing Applications" at SRM Institute of Science and Technology.





#### **Workshop on AWS Brake**

The "AWS Braket workshop program" took place from July 13<sup>th</sup> to 15<sup>th</sup>, 2023. It was organized by the Department of Computing Technologies at the School of Computing, SRM Institute of Science and Technology, located in Kattankulathur, Chennai. A total of 15 faculty members and 5 students participated in the AWS workshop hosted at SRM Qkrishi Centre of Excellence in Quantum Information and Computing.



#### **Outreach Programme**

A one-day outreach program focusing on "Quantum Computing & Hands-on Session with Qiskit" was hosted for Panimalar Engineering College students at the IMAC lab, Department of Computing Technologies, SRMIST, on August 1<sup>st</sup>, 2023. Dr. M. Gayathri conducted a session on Quantum Computing, which 50 students from Panimalar Engineering College participated.



#### **Quantathon 1.0 Hackathon**

The "Quantathon 1.0" hackathon, in collaboration with Qkrishi, Bosonq PSI, Quentangle, and My Quantum Technologies, was organized by the Department of Computing Technologies. It took place on August 18<sup>th</sup> and 19<sup>th</sup>, 2023, as a 24-hour event. A total of 169 student teams from various colleges registered for the competition. After a rigorous selection process, 39 teams were shortlisted, and 30 eventually participated in Quantathon 1.0. Dr. Shankar Venugopal, Vice President of Tech Mahindra, inagurated the event.



#### Research Proposal(s)

#### Two proposals were submitted under Vaibhav Fellowship on July 2023

Dr.M. Pushpalatha, Dr.M. Gayathri have submitted proposals with Dr.Pinaki Sengupta of NTU Singapore. (Project title: Simulating quantum many body physics on near term quantum computers).

Dr.M.Pushpalatha, Dr.M.Gayathri have submitted proposal with Dr.Chitraleema (University of DELAWARE , USA) ( Project Title: Spin Qubits in 2D Quantum Materials).

#### Two proposals were submitted under Indo US call:

Dr.M.Pushpalatha, Dr.M.Gayathri in association with Qkrishi, Greg Byrd (North Carolina state university) submitted a proposals titled (QFinBox: Pioneering Financial solution through quantum computing) on Sept 20 2023.

Dr.M.Pushpalatha ,Dr.M.Gayathri , Dr.Ramkumar, and Dr.A.Suresh in association with Vijayansugumaran (Oakland university) submitted a proposal titled : Qu ID Auth Protocol with Restricted Pre shared key access using Photons on Sep 2023.

#### **SRM Quantum Computing Club students Achievements:**

The following students have achieved Quantum Excellence Badge in IBM summer school 2023. The students are the part of <SQ|QuIC> Lab and SRM Quantum Computing Club.

B.SaaruDarshini, Tanishq Kumar(CTECH), Amit Modhwadia (CTECH) Sudarshansomenini (CINTEL)

Amit Modhwadia and Saaru .B have completed certifications by Qubit for the course "Introduction to quantum computing course and final Project".

## Accelerated Computing



Incharge: Dr.B.Amutha

Dr.B.Amutha addressed as a Guest Speaker on 'Al in Quality Healthcare'- in QASH Program in SRM Hospital on 05.09.2023.



Dr.S.Nagadevi and Dr.Vidhya R participated in 5 Days hybrid mode Faculty Development Programme on "High Performance Computing" organized by the Department of IT & Dept of CSE, Walchand College of Engineering, Sangli from 26.7.23 to 30.7.23.

#### Online course by NSM Nodal

Dr. Sathyapriya L has registered for the online course "GPU Computing with MATLAB Course" Organized by the NSM Nodal Centre for Training in HPC and AI, IIT Madras from September 30th to November 25th, 2023

#### Research Proposal

Dr B. Amutha and DrR.Thamizhamuthu submitted a project proposal titled "Lift Workload Optimization using Deep Learning Techniques" to SRMIST, KTR in October 2023.

## **Visual Computing**

Incharge: Dr. S. Sridhar



#### **Lab** Establishment

In association with Madras Mind Works on 29/9/2023 Mr. Sathyapriyan S, Director, Madras MindWorks Pvt. Ltd., Chennai and with his technical team had a discussion on "How to use the Visual Computing Lab equipment".







#### **Events Organized**

Two Days Workshop with Hands on Training in Computer Vision, in associated with Madras Mind Works on 19/9/2023 & 20/9/2023 conducted by Mr. Sathyapriyan S, Director, Madras Mind Works Pvt. Ltd., Chennai.





Workshop with Hands on Training in Computer Vision

Dr. S.Sridhar, Dr. R.I.Minu, Dr. B.Arthi& Dr. Aruna M, participated in IET CLN Industry Institution Summit 5.0 (IIS 5.0) at the Feathers A Radha Hotel on 1st Sep 2023



# Advanced Multilingual Computing

Incharge: Dr. C.N. Subalalitha



#### **Resource Persons**

Dr. Subalalitha C.N delivered a seminar on the topic, "Language Models and Parts of Speech Taggers" on 01.08.2023 at St. Joseph Engineering College, Chennai.

#### **Consultancy projects**

Dr.V.V.Ramalingam and Dr.Pandian has completed consultancy project for "Infostash" during the period June 2023 to September 2023.

#### **Publications**

Roopchand Reddy Vanga, M. S. Bharath, C. Sindhu, G. Vadivu, and Hsiu Chun Hsu published a paper titled, "Grade It: A Quantitative Essay Grading System" at International Conference on Innovative Computing and Communications. August 2023.

Roopchand Reddy Vanga, C. Sindhu, M. S. Bharath, T. Charandeep Reddy, and Meghana Kanneganti published a paper titled, "Autograder: A Feature-Based Quantitative Essay Grading System Using BERT", in ICT Infrastructure and Computing, September 2023.

R Srinivasan, D Rajeswari published a paper titled, "A Framework for Classifying Imbalanced Tweets Using Machine Learning Techniques", in Perspectives on Social Welfare Applications' Optimization and Enhanced Computer Applications, 2023.

Dr.V.V.Ramalingam, Saviour published a paper titled, "The Grammatical Structure Used by a Tamil Lyricist: a Linear Regression Model with NLP", in Soft Computing, October 2023.

#### **Patent Granted**

Dr. Subhalalitha, Dr.B.Amutha and Karthik Nanmaran were granted a patent titled "A system of converting Tamil text to speech and a Method Thereof" on 04.07.2023.

## Green Computing

Incharge: Dr. E. Poovammal



#### **Events Organized**

#### Sustainable Horizons: Exploring Environmental Stewardship in Electric Vehicles on 13.09.2023.

The Green Computing vertical organized a webinar to explore and discuss environmental stewardship in the context of electric vehicles. The Resource Person Dr. Vasan Prabhu Veeramani, Technical Leader at Great Learning, an esteemed expert in the field led the session and provided valuable insights fostering the discussions among the participants through digital mode on 13.09.2023. Key topics covered during the webinar include sustainable practices, innovation in electric vehicle technology, and the environmental impact of electric vehicles.

#### AI in Sustainable Product Development on 19.09.2023

The vertical Group organized a guest lecture on 'AI in Sustainable Product Development' on 19.09.23 in Ramanujan Hall, Tech Park at 10 a.m. The event had the privilege of hosting Dr. SanthojiKatare, a distinguished expert in the field, currently serving as the Technical Leader and General Manager at Ford. The lecture explored the crucial role of Artificial Intelligence (AI) in advancing sustainable product development, leveraging Dr. Katare's extensive industry experience.





#### Automation and Orchestration on 21.09.2023

Mr. Mohandoss, Professor of Practice, Dept., of Computing Technologies have handled interactive sessions titled "The Basics of Cloud Computing Essentials Concentrating on Automation and Orchestration" on 21<sup>st</sup> September, 2023 for the benefit of B.Tech third year core CSE and Cloud Specilized students.



Automation and Orchestration

#### **Patent Granted**

Dr. S. Padmini, Associate Professor has been granted a patent titled, "Intelligent Machine Learning Based Chip Control Oxygen Concentrator with Filter" from Intellectual Property Rights of India.

#### **Faculty External Activities**

Dr.S.Padmini ,Associate Professor served as a resource person for a webinar conducted on the topic,"Application of AI techniques for power system protection" on 31st August 2023.

#### **Events Planned**

A Guest lecture titled "Renewable Energy Integration in Smart Grid Environment" on 1st November 2023 by Prof. Ramesh Bansal FIET (UK), FIE (India), FIEAust, SM IEEE (USA), CPEngg (UK), University of Sharjah, University of Pretoria.

A Guest lecture on 2nd November 2023, titled "Environmental and Health impacts of Plastics: Challenges and Solutions" By Dr.Govarthanan, Professor (Research), Department of Environmental Engineering, Kyungpook National University, Daegu, South Korea.

A Guest lecture on 3rd November 2023, titled "The Role of Energy Transition in Achieving UN Sustainable Development Goals" by Professor Atif Igbal, Dept. of Electrical Engineering, Qatar University, Qatar.

# Theoretical Computing

Incharge: Dr. K.Vijaya



# **Upskilling Activities**

Nine faculty members from Theoretical Computing Vertical attended and completed the Faculty Development Module on "Effective Teaching of Compiler Design" for one week from July 13<sup>th</sup> to 17<sup>th</sup> 2023, which was organized by IIT Madras.



Faculty Upskilling AT IIT Madras

# **Events Organized**

Faculty Development Programme on "Evolving Potentials in Quantum Computing Applications" was conducted from 11<sup>th</sup> to 15<sup>th</sup> September 2023.





FDP on Evolving Potentials in Quantum Computing Applications

# Research Proposal

Dr.K.Vijaya and Dr.R.AntoArockia Rosaline have submitted the project titled "EmoSenseCam: Fostering Higher Education Student's Wellness through Advanced Mood Sensing Methodology" to TNSCST during August 2023.

# CTECH ASSOCIATION ACTIVITIES

06

#### SEP

2023

#### CTech Association (FUTURIX) -Inauguration

The Association-Department of Computing Technologies, named FUTURIX, was inaugurated on the 6th of September under the theme "Where imagination ignites limitless tomorrow." The event commenced with a Tamil Prayer, followed by the anchor introducing the staff members, Chief Guest Dr.Unnikrishnan P K, Head of R&D Tyre Testing at Global R & D Asia, and the speaker. Dr.Unnikrishnan P K inaugurated and unveiled the FUTURIX logo.

Association Convener Dr. M. Murali, Professor in CTECH introduced the list of FUTURIX office bearers during the event. The Chief Guest shared his inspiring journey, emphasizing the value of education and opportunities available to Indian youth. He encouraged students to be innovative and creative in solving problems.

Felicitations from Dr. M. Pushpalatha, Head of the Deparment , and Dr.RevathiVenkataraman, Chairperson of the School of Computing, were significant. The event concluded with everyone standing for the National Anthem. It was organized by faculty members, including Dr. B. Kanisha, Co-Convener, Dr. Saravanan, Dr. Sindhuja, Mrs. Ranjani, Dr. Ramesh, and Ms. Ramya





SEP

2023

CTech Association (FUTURIX)- Tech Mesh'23

FUTURIX, the Student Association of the Department of Computing Technologies at the School of Computing, SRMIST, hosted TECHMESH '23, a three-day incredible event focused on technology and future innovation. Students from various departments participated, experiencing a unique blend of innovation, competition, and inspiration.

From September 25<sup>th</sup> to 27<sup>th</sup>, FUTURIX embarked on a thrilling tech journey at TECHMESH '23, and it was an exhilarating ride! Here's a quick rundown of the three action-packed days:

TECHMESH '23 kicked off with an inauguration ceremony. Our Chief Guest, Dr. Ebenezer Chellasamy Edwin, a Scientist from the Indian Institute of Astrophysics, inaugurated the event and delivered a speech on the application of Computing Technologies in space. He shared his journey as a Scientist and head of the Solar Observatory with the students, inspiring them with future opportunities. Following that, FUTURITHON 1.0, an Ideathon, was conducted to enhance student contributions & showcase their skills. A total of 60 teams registered, and 21 teams were selected by the technical coordinators. It was an honour to have Dr. Ramesh and Dr.Ramya from SRM Incubation Centre as the event's jury. The shortlisted teams presented their topics, and the top 3 teams were announced as winners at the end of the event.

CODE QUEST, a coding competition, challenged students' coding skills on the second day. A total of 193 individuals participated in the Code Quest. The registered participants were divided into two groups: Batch 1 and Batch 2, with 47 participants in Batch 1 and 80 participants in Batch 2. The event concluded after all participants completed Round 2 (Hackerrank), and the top 3 candidates were announced as winners.

On the third day of TECHMESH '23, our Prize Distribution Ceremony highlighted the tech wizards who conquered the challenges.









TECHMESH '23 Prize Distribution Ceremony

# PROFESSIONAL SOCIETY AND STUDENT CLUB

# **ACTIVITIES**

21

AUG

2023

#### **SRM-ASI Student Chapter Event**

The five-day National Workshop on Data Analytics and Machine Learning (DAML'2023) was inaugurated by the esteemed Head of the Department, Dr. M. Pushpalatha. Dr. S. Nagadevi, the workshop's Convener, worked tirelessly to ensure its success. The event attracted a total of 93 participants, including 33 external participants from various engineering colleges and 60 internal students and faculty members of SRM Institute of Science and Technology. The interactive session was led by Mr. S. Rajalingam, Senior Technical Head (Data Sciences) from HCL. The workshop received sponsorship from Dr. S.V. Kasmir Raja, Former Dean-Research at SRMIST and Convener of the Indian Science Congress Association (ISCA) Chennai chapter.



NeuRes 2.0 - flagship event of Data Science Club

**23** 

SEP

2023

The NeuRes 2.0 Seminar, a flagship event of SRM's Data Science Community, delved into the cutting edge of artificial intelligence and its ethical implications. Featuring notable speakers like Mr. Ganapathy Shankar discussing Al breakthroughs, Mr. Sureshkumar Ramasamy exploring ethics, and Ms. Irfhana Z revealing data science's promise, the event included engaging talks and an Al/ML quiz. Anubhav Pathak's presented the closing remarks.





# **IEI STUDENT CHAPTER**

- IE(I) Faculty Advisor, Dr.Uma Devi M (FIE)
- **IE(I)** Faculty Coordinators, Dr Jayapradha J(MIE), and Dr.Elaizer M(MIE)
- **IE(I)** Mentors: Dr.Bibin Christopher V, Dr.Deepajothi S, Dr Shoba LK, Dr.Jane Olive Sharon P, Dr Shibu NV

### **27 & 28**

# IE(I) Sponsored All India Seminar on Front- End Application Development Using HTML, CSS, Javascript and React JS

**July** 2023

This event was a significant milestone in addressing the industry's growing demand for front-end developers and fostering the development of young minds in this field. We are delighted to report that 118 students participated in the seminar, and their feedback has been overwhelmingly positive.





# **07**

#### IE(I) Sponsored One Day Workshop On Embedded System Design Ir Automotiveelectronics

**AUG** 2023

The workshop immersed participants in the intricate world of Embedded C programming. Attendees gained invaluable insights into coding practices and techniques specific to embedded systems. They also had the opportunity to roll up their sleeves and get hands on experience in writing efficient and optimized code using Embedded C.





**27** 

#### Mastering the Art of Resume Building

**AUG** 2023

emphasizing the critical role of a well-structured resume. He highlighted that a resume serves as the initial point of contact between an applicant and potential employers,

underscoring the need for an impactful first impression. Varun shared several crucial subheadings and points that should be integrated into a resume to make it shine.

Varun Tondon, a notable figure in the tech industry, opened the event on 27th August by

SEP

2023

#### **Shortfilm Contest**

On September 4, 2023, the Department of Computing Technologies, IEI Students' Kattankulathur Local Chapter, organized a Short Film Contest, drawing 25 teams from Tamil Nadu colleges. Esteemed judges from the "Iraivan" movie and "Ayali" web series recognized three outstanding films. "Yen Ethuku" won the first prize for its storytelling and cinematic excellence, "Doorbell" was the first runner-up for its engaging content, and "Trash Trouble" secured the second runner-up position for its unique perspective and impactful message. Judges Mr. Karthikeyan Sethuraj, Mr. Sachin, and Mr. Muraleeswaran presented the awards, highlighting the promising future of Tamil Nadu's film industry. The 2023 Short Film Contest left an indelible mark, inspiring creative minds.



SEP

12

2023

#### One day Webinar on Generative Al

The webinar united industry experts, academia, and scholars, fostering knowledge exchange on Artificial Intelligence and Natural Language Processing. We delved into Al intricacies and versatility...

# **13**

SEP

2023

#### **Coding Contest**

The event, hosted on the HackerRank platform, witnessed enthusiastic participation from students across eight different colleges, highlighting the growing passion for coding and problem-solving.



#### IE(I) STUDENT CHAPTER

On September 15, 2023, the IE(I) Kattankulathur Local Chapter organized the 56<sup>th</sup> Engineer's Day in which CTECH Department's Magazine "Souvenir of IE(I) CTECH Department" and a video showcasing their accomplishment was released.



26h

2023

# **OUTREACH ACTIVITIES**

12 &13

#### **Inspirational Parenting - Grooming Young Minds**

SEP

2023

A faculty team led by Dr. B. Arthi, Dr. M. Aruna, Dr. C. Jothikumar, Dr. V. Deepan Chakravarthy, Dr. G. Padmapriya, and Dr. K. Deeba organized a two-day Outreach Program on "Inspirational Parenting - Grooming Young Minds" at Little Angels Nursery and Primary School in Paraniputhur on September 12<sup>th</sup> and 13<sup>th</sup>, 2023.





Outreach program at Little Angels Nursery and Primary School, Paraniputhur

12 &13

#### Awareness of Self Health and Hygiene for Government School Students

SEP

2023

Dr. A. Pandian, Dr. V.V. Ramalingam, and Dr. M. Baskar, partnered with Unnat Bharat Abhiyan for a 2-day Outreach Program on "Awareness of Self Health and Hygiene" for Government School Students at Panchayat Union Middle School, Orathur on September 12-13, 2023





Awareness of Self Health and Hygiene for Government School Students Panchayat Union Middle School Orathur

"Start where you are. Use what you have. Do what you can." --Arthur Ashe

# ALUMNI ACTIVITIES

20

# Alumni Talk on From Pressure to Possibilities, Finding Your Place in the Competitive World

**JULY** 2023

Transistioning from the academic environment to the competitive world can often feel like a daunting and high-pressure. However, it's essential to remember that this phase also holds immense possibilities and opportunities for growth. In this talk, Students explored how to navigate this transition effectively, turning pressure into possibilities. Kushee spoke on navigating the competitive world.

18

**AUG** 2023

#### **Mock Interview**

Chilvant and Jayant conducted interviews for 15 students each from the 2020-2024 batch, resembling a standard placement interview. They covered a range of HR and technical questions. Following the interviews, Chilvant and Jayant provided valuable feedback to the candidates, discussing their strengths and weaknesses and offering guidance on how to address their areas of improvement.

02

SEP 2023

#### Alumni Talk on Profile Building in Resume

Profile building, often referred to as a resume summary or career summary, is a vital component of a resume. This concise section, typically a few sentences or a short paragraph, appears at the beginning of your resume. It offers a snapshot of your qualifications, skills, and career objectives, serving as an introduction to your resume. It provides prospective employers with a quick overview of your qualifications and what you can bring to the table.

23

AUG

2023

#### Alumni Talk on Experience Researching of Infodemiology

The digital realm has often been considered a double-edged sword: a potent tool for information dissemination, yet a vessel for misinformation. As technology has integrated into every facet of our lives, now we consume, interpret, and distribute information has transformed significantly. Into this intricate web stepped Ms. Irfhana Z, an alumnus who has deeply delved into the digitall era's nexus of information and epidemics.



#### **EVENT GLIMPSE**

27

**July** 2023

#### Programming for Problem solving – Faculty Development Program

A five-day Faculty Development Program (FDP) on "Programming for Problem Solving" was held on July 27, 2023, for non-Computer Science faculties. The program was organized by D. Malathi and Dr. P. Selvaraj. Expertly conducted sessions were led by various faculty members, including Dr. Anto Arockia Roseline, Dr. J. Kalaivani, Dr. C. N. Subalalitha, Dr. Karpagam, and Dr. N. Parthiban, covering a diverse range of topics and hands-on activities related to the course units. This five days FDP provided valuable insights and learning opportunities for all participants, enhancing their teaching and problem-solving skills in computing.





08

**Sep** 2023

#### MITACS Internship Webinar

On September 8, 2023, the Department of Computing Technologies hosted a MITACS Internship Webinar in an online mode. The session was facilitated by Mr. Satvik Kumar, a final year B.Tech student who is presently a MITACS Intern at McGill University, Quebec, Canada. This event attracted over 200 students who actively participated and had their queries addressed, gaining valuable insights into the internship opportunities.



21

**Aug** 2023

#### The Challenges of Electronic Medical Record Implementation

Dr.IngeDhamanti & Dr.Syifa'ulLailiyah from Universitas Airlangga, Indonesia handled sessions titled "The Challenges of Electronic Medical Record Implementation: Sharing from Indonesia - Research sharing about health information system" and "Opportunities for Collaboration with University Airlanga"



**07** 

Entrepreneurship and Innovation as a Career Opportunity

Sep

2023

Dr.A.Devipriya conducted an awareness session on "Entrepreneurship and Innovation as a Career Opportunity" for CTECH student.

**Sep** 2023

#### Technical talk on "Data Science and its Applications"

Dr.A.Devipriya conducted a Technical talk on "Data Science and its Applications" for CTech students.

# 27

**Sep** 2023

#### **Software Coding Practice and Standards**

A one-day Faculty Development Program on "Software Coding Practices and Standards" took place at SRMIST, KTR, aimed at acquainting School of Computing faculty members with industry coding standards. The program encompassed sessions on writing programs adhering to coding standards and discussions on rubrics for student program evaluation. Dr. Mariappan Vaithilingam, Senior Engineering Manager at Uber Inc, Bangalore, served as the resource person and emphasized the significance of industry coding standards in software development..



# 20

**Sep** 2023

#### Skill Development workshop on Python programming

The Department of Computing Technologies has conducted the Skill Development workshop on Python programming for the programmers of CTECH Department and other Departments of School of Computing for two days. The program is organised by CTECH department in association with the Institution of Engineers (India), Kattankulatur local chapter. The workshop is handled by the Dr.B.Ezhilavan, Founder; CEO, VEI TECHNOLOGIES PVT LTD., CHENNAI.



# **26**

**Sep** 2023

#### Publishing Your Course on Udemy: A Step-by-Step Guidance

The session was delivered by Dr.K.Deeba, Assistant Professor, Department of Computing technologies. The workshop was designed to equip the participants with essential knowledge on skills for creating and promoting courses on the Udemy platform. It covered key topics, including an introduction to Udemy's role in online learning, the course creation process, recording and production techniques, student engagement strategies, and pricing and promotion insights. Around 100 faculties across the School of Computing attended the session.

**Sep** 2023

#### DigiZest 1.0

The First edition of DigiZest 1.0, A Technical Hackathon, organized by the Department of Computing Technologies was conducted on 07-09-2023 and 08-09-2023. The Hackathon was organized by the Placement Team of School of Computing. The event witnessed the participation of 223 participants grouped into 50 batches. The batches were evaluated by Ms. Uma Maheswari Radhakrishnan, Director, Head, Zoho School of Technology, Chennai, Ms. Prathika Kesavan, Head of Department - Server-side Technologies, Zoho School of Technology and Mr. Nagaveer Founder, CEO, CCC Digital India Private Limited. The event was sponsored by CCC Digital India Private Limited. The winners were awarded a cahs prize of 60,000 INR and provided with Internship Opportunities by Mr. Nagaveer Founder, CEO, CCC Digital India Private Limited.





**27** 

**Sep** 2023

#### Daylong Workshop on Standardizations for Faculty Members

The Bureau of Indian Standards (BIS) organised a workshop on standardisation at SRM Institute of Science and Technology (SRMIST), Kattankulathur, on  $27^{th}$  September 2023 as part of its educational outreach programme. BIS had earlier signed a Memorandum of Understanding with SRMIST. The objective is to undertake research projects related to standardisation, introducing topics on standardisation in the syllabus, and to organise educational programmes. Shri A R Unnikrishnan, Senior Director from Delhi BIS Head Quarters, Shri. G Bhavani Director & Head, Chennai BIS Branch and 4 more scientists from various BIS offices trained our faculty members.





"Whenever you find yourself on the side of the majority, it is time to pause and reflect."

--Mark Twain

### NON ACADEMIC EVENTS

**13:14** 

SCO - Faculty Fit 2023

**July** 2023 The School of Computing Faculty Sports event was a thrilling and lively occasion, bringing together faculty members of SCO for a friendly interaction, teamwork, and physical activity. This event was designed to promote a healthy lifestyle, foster a spirit of collaboration, and provide a refreshing break from academic responsibilities.



**28** 

Aug

2023

#### **Onam Celebration**

The Department of Computing Technologies celebrated Onam, the vibrant and joyous harvest festival of Kerala, with great enthusiasm and cultural fervor. The event aimed to bring together members of the community to rejoice in the spirit of Onam, showcasing the rich traditions, cultural heritage, and delicious cuisine of Kerala.



# **New Student Orientation Programme 2023**

The Department of Computing Technologies (CTECH) hosted a first-year orientation program on August 11, 2023, to welcome new students and introduce them to the myriad opportunities at SRMIST. The program began with an address by Prof. Dr. Revathi Venkataraman, Chairperson of the School of Computing at SRMIST, highlighting the departmental activities and opportunities. A video showcased the CTECH Department's achievements.

Prof. Dr. M. Pushpalatha, Head of the Department, presented insights into the Department's structure and research areas. Prof. Dr S.S. Sridhar narrated the teaching methodologies, the curriculum, and interdisciplinary research activities. Dr B. Muruganantham outlined the Anti-Ragging Committee's role and created a strong awareness among the students. Dr. M. Murali highlighted the Department Association's benefits and encouraged the students to active participation. Dr Akilandeswari P, Dr. Lavanya R, and Mrs. Sowmiya B, the academic advisors, ensured an engaging experience and guided the students on a campus tour led by the Faculty Advisors.









# **UPCOMING EVENTS**

| Date        | Name of the Event                                                                                      |
|-------------|--------------------------------------------------------------------------------------------------------|
| October'23  | Workshop on Al Intensified Scientific Accelerated Computing (AllSAC) in Interdisciplinary Applications |
| October'23  | IPR Workshop on Patent School Workshop Series                                                          |
| November'23 | Workshop on Deep Learning for Healthcare Image<br>Analysis                                             |
| November'23 | Project Expo on WAVE 2023                                                                              |
| November'23 | CTECH Association Workshop on E-Gnite'23                                                               |

# **GALLERY**







# **GALLERY**





#### குறள் 661: வினைத்திட்பம் என்பது ஒருவன் மனத்திட்பம் மற்றைய எல்லாம் பிற

#### vinaiththitpam enpadhu oruvan manaththitpam matraiya ellaam piRa

Firmness in action is (simply) one's firmness of mind; all other (abilities) are not of this nature.











