



**SRM**  
INSTITUTE OF SCIENCE & TECHNOLOGY  
(Deemed to be University u/s 3 of UGC Act, 1956)

# SMART SPRINKLERS

Quarterly Edition | Vol 2 | Issue 1 | July - Sep 2022

*The  
Official Newsletter  
of Computing  
Technologies*



SCHOOL OF  
COMPUTING



## Editorial Message



In order to be irreplaceable, one must be different '

As we head in to our next quarter of "Smart Sprinklers" , we are pleased to continue to bring our readers- for students, parents, faculty members, educators - there is news about invention, innovation, information, studies about new technologies and achievements.

In this issue, we have great contributions from many of our faculty and students. They share with you their knowledge in their domain that are new and innovative and their enthusiastic contributions to inform you so you would become the fillers of next edition.

Everyone is at a different phase in the planning process and we try to give you the valuable insight, regardless of the boat you are sailing with. Let us get to bliss by cultivating some essential states of our thinking which leads to Smart Sprinklers in the meadows of knowledge. The journey of nearing reflection, feelings and experiences in the form of Smart Sprinklers would not have been possible without the constant guidance and motivation of Chair/ SoC and HoD/CTech.

I am hopeful that this small piece of literary work shall not only develop the task for reading among readers but also develop a sense of belonging to our institution as well, as they take a trip down the memory lane with Smart Sprinklers.

Smart Sprinklers! It just happened with a tranquil feeling of inner space and trust, as the sky is not too far!!!

*Dr. B. Amutha*

SCO-Newsletter –Head  
Department of Computing Technologies

## Newsletter Team



**Dr. M. Suchithra**  
Newsletter Coordinator



**Dr. B. Kanisha**  
Proof Reader



**Dr. R. Renuka Devi**  
Content Writer



**Dr. P. Nancy**  
Content Writer



**Dr. Shiny Irene**  
Content Writer



**Mr. N.A.S Vinoth**  
Content Writer



**Mrs. M. Ranjani**  
Content Writer



**Mrs. R. Vidhya**  
Content Writer



**Dr. K. Kishore**  
Designer

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# Message from Head of Department

Dear All,



*Dr. M. Pushpalatha*

Professor and Head

Department of Computing Technologies

I pen this message to share the happiness of CTech happenings. One bright spot is that, notwithstanding any hindrance, we strive to expand and recruit more faculty members of outstanding quality and likewise with students.

Our department was also granted a good Infra ambiance from the Institute to promote research. The contributions of our students and faculty members were significant and we wish to pursue them at the same pace. SMART SPRINKLERS is a ready reckoner to the CTech Team every quarter.

We are thankful to our alumni for their continued support. The meeting with the '95,96,97 batch brought back great memories and we look forward to more such meet-ups. Please stay in touch and write to us with any new ideas for the department to excel further in its mission.

Warm regards, and wishing you all the best.

## 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 center 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 body of nearly 5000 undergraduates, 50 postgraduate students, 100+ 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.

## Ph.D Awardees

Evidently, the years of hard work and deication has finally resulted in the most significant fruit you have ever wanted. Many congratulations on your 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 on your achievements.

### **Mr. R. Subash**

**Title:** *Reinforced Trustworthy Paradigm for Managing Smarter Devices in Social Internet of Things*

**Research Supervisor:** **Dr .R. Jebakumar**

### **Mrs. S. Nagadevi**

**Title:** *Design and Development of Efficient Multi-Core Aware Virtual Machine Placement Algorithms for Cloud Data Centers*

**Research Supervisor:** **Dr. S.V Kasmir Raja**

## New Joiners

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

**Dr. R. Anto Arockia Rosaline**  
*Assistant Professor*

**Dr. S. Vidhya**  
*Assistant Professor*

**Dr. U. V. Anbazhagu**  
*Assistant Professor*

**Dr. S. Shanmgam**  
*Assistant Professor*

**Dr. Rohit Kumar**  
*Research Assistant Professor*

**Dr. G. Ramya**  
*Assistant Professor*

**Dr. S. Ramesh**  
*Assistant Professor*

**Mrs. K. Madhumitha**  
*Assistant Professor*

**Dr. M. L. Sworna Kokila**  
*Assistant Professor*

**Dr. R. Geetha**  
*Assistant Professor*

**Dr. A. Anbarasi**  
*Assistant Professor*

**Dr. D. Vinod**  
*Assistant Professor*

**Dr. P. Saravanan**  
*Assistant Professor*

# New Infra Endowment

SRMIST, School of Computing established **iMac Lab** on 3<sup>rd</sup> August, 2022 by Honorable Chancellor, SRMIST to provide Research ambience with high configuration Macintosh Machines. The students developing collaborate projects viz., LaTrobe University, Samsung ,etc., and other research projects under the faculty mentorship are overwhelmed with the facilities provide.





# New Infra Endowment

SRM Qkrishi **Quantum Centre of Excellence** was established on September 9th 2022 to Focus on Teaching and Research to help India Lead in Quantum. SRM and Qkrishi collaborate join hands to work with faculty, students and researchers to get hands-on with quantum computing to solve tough industry problems. SQ-QuIC was officially Inaugurated by Dr. C. Muthumizhchelvan, Vice Chancellor, SRMIST. This First of a kind Centre of Excellence in a private university in India, will bring together the SRM faculty, research students and Qkrishi scientists to work on cutting edge quantum algorithms and applications research.



# Congratulations

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Dr. Niranjana G received a fund for a research project entitled "Automated deep learning framework for covid disease detection and analysis in Southeast Asian countries using computed tomographic images" under DST \_SERB ASEAN -India collaboration scheme for a total outlay of Rs.18,57,696 for a duration of 3 years.



Dr Selvin has received a fund of Rs 1,89,000 for the project titled, Mechatronics, Networking and Communication, SRM Agriculture Sciences "Smart IoT based AI driven Integrated Farming at SRM Urban Farm Centre" SRMIST In-house Multidisciplinary projects for 2 years.



# Congratulations

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Dr.Subalalitha C.N received a fund of Rs. 7,42,275 from SRM Institute of Science and Technology, a Research Project entitled "Building Humanoid Professor" for a duration of 2.5 years.

Dr.Subalalitha C.N was awarded as "Young Innovator " by MIT-World Peace University, Pune, Maharashtra in The Research Design Innovation and Entrepreneurship (RIDE 22) conclave on September 24th 2022.

Dr. Subalalitha C.N was assigned as Research Trainer for Mr.Karma Wangchuk , Research Scholar, Royal University of Bhutan, Bhutan under the Indian Science and Research Fellowship(ISRF) Award by Indian National Science and Academy(INSA),New Delhi.

# Congratulations

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Dr R I Minu has received the 1st instalment fund of Rs.35,400/- for the constancy project titled "AutoStuff App" , its a 6 month project

Dr R I Minu was sanctioned an amount of Rs. 5 Lakhs for a Multidisciplinary Internal funded project titled "Development of an X-Reality Human Machine Interface (HMI) for instructor-Free Learning in Laboratories"

# Congratulations

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Dr.M.Gayathri as Co PI has received a fund of Rs 3,90,000 for the project titled “Design and development of console based gaming for balance training in autism spectrum disorder children” from SRMIST ( Internal funding for multidisciplinary project) for 2 years



Dr.K.Deeba has published an online course in UDEMY portal on the title “Genetic Algorithm Concepts and Working”, was published and on live from 11th August 2022.



# Congratulations

The faculty have been awarded an appreciation certificate at the Teacher's Day event for contributing to teaching and research publication.

Dr Pushpalatha  
Dr. S. S. Sridhar  
Dr. E. Poovammal  
Dr.Malathi D  
Dr Amutha  
Dr Sabhanayagam T  
Dr.M.Murali  
Mrs.K.R.Jansi  
Dr. G.Niranjana  
Dr. R. Jebakumar  
Dr. Akilandeswari. P  
Dr. T.Senthil Kumar  
Dr. Selvaraj P  
Dr.M.Eliazer  
Dr. R. Thenmozhi  
Dr. Umamaheswari KM  
Dr. Pandian a  
Dr.Ramalingam.V.V  
Dr.Deeban Chakravarthy.V  
Dr.R.Jeya  
Dr. G.K. Sandhia  
Dr. Nagadevi  
Dr. M.ArulPrakash  
Saminathan S  
Dr.Vidhya R  
Dr. Pradeep S  
Dr. Saranya P  
Dr. S.Kiruthika Devi  
Ms.Priya.S  
Dr. C.Santhanakrishnan  
Mrs.D.Vanusha  
Jayavarthini C  
B.Ida Seraphim

Sowmiya B  
Dr. R Subash  
Dr. Saranya.S.S  
Dr. M.Karthikeyan  
Jayapradha J  
Dr. Sindhu C  
J. D. Dorathi Jayaseeli  
Rajalakshmi M  
Dr. R.Anita  
Dr. Gayathri.M  
Dr. Subalalitha CN  
Senthil raja M  
Srinivasan  
Iniyan S  
Nithiya S  
Nithyakani P  
Dr. Maria Nancy  
Dr. M.Revathi  
Ms.D.VIJI  
Mr. Sibi Amaran  
R LAvanya  
Ms.S.Veena  
Dr.M.Uma Devi  
Dr. J. Selvin Paul Peter  
Dr Usha G  
Dr. P Renukadevi  
Dr. R.Brindha  
Malarselvi .G  
M.Vaidhehi  
Ramaprabha Jayaram  
Ms. BRISKILAL J  
Mrs.Vijayalakshmi M  
Dr R I Minu

Dr. Baranidharan  
Dr.S. Babu  
Dr.J.Kalaivani  
Dr. k.pradeep mohan kumar  
Dr. Madhavan P  
Dr.Ramamoorthy S  
N.A.S.Vinoth  
Dr. Murali P  
Dr.B.Sivakumar  
DR. Ramkumar Jayaraman  
Dr. M. Baskar  
Dr M Kanchana  
Dr. Vijaya Kalavakonda  
Dr. Suchitra M  
Dr. L. Kavisankar  
Dr. J. Rene Beulah  
Dr. C. Pretty Diana Cyril  
Dr. Godfrey Winster S  
Dr.B.Arthi  
Dr.R.Manjula  
Dr. Geetha. K  
Dr. Arunachalam N  
Dr. M. Aruna  
Dr. Kanisha B  
Dr. Sindhuja M  
Dr. Kishore Anthuvan  
Dr.S.Gnanavel  
Dr. Karthikeyan U  
Dr. Muralidharan C  
Dr. Ragunthar Thangavelu  
Dr. Shiny Irene D  
Dr. Vegesha S M Srinivasavarma  
Dr. Kirubanantham P  
Dr. K.Alice

# Congratulations

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## *University Rank Holders*

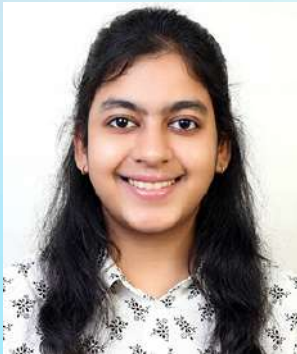
### ***B.Tech***

*Mishika Agrawal - Rank 2*

*Ayushi Mathur - Rank 3*

### ***M.Tech***

*Raya - Rank 1*



**MISHIKA AGRAWAL**  
**CGPA: 9.96**



**AYUSHIMATHUR**  
**CGPA: 9.91**



**RAYA**  
**CGPA: 9.82**

# Congratulations

Ms.Malvika Bansod 3rd year B.Tech CSE Sport Achievement Glimpse:

Bronze Medal at the CM Trophy India International Challenge Badminton tournament held at Raipur, Chattisgarh from 21st to 25th September 2022 and featured in Powerful women submmit 2022.

Bronze Medal in the Team event for Maharashtra at the prestigious 36th National Games in Surat, Gujarat in September

Silver medal in the individual event at the National Games in Surat, Gujarat in September.



## All India Senior Badminton Tournament Malvika Bansod triumphs, Rohan finishes runners-up

LOKMAT NEWS NETWORK  
NAGPUR

Malvika Bansod and Rohan Gurbani excelled at the Yonex-Sunrise V.V. Natu Memorial All India Senior Ranking Badminton Tournament which concluded at the PDMA Hall, Shivaji Nagar, in Pune on Sunday. While top seed Malvika

Malvika, who is supported by Vishwara Infrastructure Limited (VIL), has been in splendid form this season and has also reached her career-best world ranking of 41.

Qualifier Rohan had a dream run in the competition and impressed everyone with his outstanding performance. The giant-killing run of Rohan was finally halted in the summit clash on Sunday by an experi-



Ms.Shreya Agarwal 1st year B.Tech CSE Sport Achievement :

Secured First Place in 10th Tamilnadu state level Senior Roll Ball Championship-2022-23 for girls held at Rajan Indoor Stadium, Chinnalapatti Pirivu, Dindigul Dist., from 03.10.2022 to 04.10.2022.



# Congratulations

Smart India Hackathon 2022 organized by Ministry of IT, Gol :  
Four Teams won the awards under various category:

“Envision Alpha” - Rishit Shivesh , Divyanshu Kaushik ,  
Ayush Sharma , Abhishek Dubey, Shrishti Gupta . On Problem  
Statement:DR709 Event/Activity Management Portal for AICTE.

“Lazy Singletons” - Soumik Chaudhuri,Vivek Matalia, Aniruddha  
Chatterjee. On Problem Statement :DH1042 E-Buddy for Rescued  
Child Labour

“Matrix United” - Srishti Rawat ,Viraj Agarwal .On Problem Statement:  
RK977 : Education ecosystem for specially abled students need  
provisions and/or improvements to take care of compliance, governance  
and conduct .

“ The Squad 69” - ARYA KESARWANI ,UTKARSH, J RAKESH,TANYA.  
On Problem Statement-SS591 (organization : ISRO)Deep learning  
based cyclone intensity estimation using INSAT-3D IR images.



# First Year Orientation

On 9th September 2022, our Department hosted an orientation session for First Year batch of UG students. The Institute has a tradition of welcoming new students with a week-long orientation session to welcome students from all around the nation. The Orientation Program was graced by the Chairperson, School of computing Dr. Revathi Venkatraman who felicitated our CSE core Branch students. Dr. M. Pushpalatha, Head of the Department, CTech addressed the students with Department highlights.



# Engineer's Day Celebration-2022

On the account of Engineer's day, four events were planned and conducted on 1&2 September, 2022. Out of all Participants 1 winner and 2 runners were selected. All the winners were distributed with prizes on 15th September, 2022 for the events conducted.





# Career News

The placement season for the batch: 2019-23 is started and successfully moving on for the 17 sections of UG students. 782 students enrolled for campus placement, 186 students opted for higher studies and 1 student is interested in entrepreneurship. Two companies named; UIDAI and Hexagon provided 4 and 1 internship offer respectively. Till date, 40 companies visited SRMIST for recruitment process and 32 companies has offered the placement opportunity. As on date, 5 students from PG got placed with an average of 10.4 lpa.

**29**

**Marque**

**319**

**Super Dream**

**239**

**Dream**

**504**

**Day Sharing**

**05**

**Internship**

**Total Offer**  
**1093**

**Unique Offer**  
**666**

## Carrer News

On 15th Sept 2022, First placement orientation meeting for 3rd year CTech students was organized by Mr.Prabhushankar and Mr.U.M.Prakash.

The technical talk on "EXPLORING THE JOURNEY OF IDEA TO COMMERCIALISATION" was held on 21st Sep 2022. Mr. Vijay Rathnam Lingaa, SIIC -SRMSIT shed light on patent filing, publication, and grant. Students and Faculty Members of Ctech Dept participated.

On 19th Sept, Presentations and Panel Discussion by directors of top-ranked US universities offering STEM masters programs.

Dr.NaveenChilamkurti , Head of the Department, Computer Science in Computer Science Engineering , La Trobe University , Melbourne, Australia visited SRMIST Campus on 29th Sept 2022. Faculty Representatives and Student representatives participated in the interaction to discuss on the Research and career prospect at La Trobe University.





# Congratulations

## to

### Marquee Placed Students



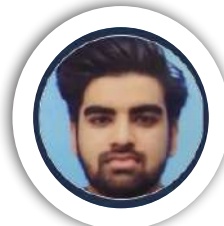
Aditi Khaitri



Aaditya Prakash



Aditya Shukla



Anmol Mittal



Ashutosh Kumar



Avad Agarwal



Bidyut Biswas



Dinesh Varma



Eeshan Dutta



Eishita Gupta



Harsh M



Harshit Raj



Mallika Sharda



Mohammad Hasan



Oishwarjya



Aditi Khaitri



Rishabh Sharma



Ritesh Kumar



Rohan Sachdeva



Sagnik



Sanjanaa



Sanskriti



Shambhavi



Shubham Kumar



Siva Gowtham



Swarnabha



Tapish Sharma



Tushar Krishna



Varun Sriteja

# Students Achievement

*We are proud to say that our students have organized and participated in many events and contests to showcase their abilities and talents. Few in a frame:*

DATA SCIENCE HACK 2022 event was conducted during 1.9.2022 – 4.9.2022 by Data Science community, in association with the School of Computing, SRMIST.

The Enigma Coding and Blockchain Club SRM conducted a hackathon, 'Data Science Hack'22.' We are excited to reveal that in the event, there was an active participation of more than 850+ participants and registration of more than 120+ teams. The winner of the hackathon event was 'Cadre Corps' & it was all because of their efforts to bring out their innovative project with fantastic presentation. The closing ceremony was held on the 5th of September at the Ramanujan Hall, SRMIST. The winners were presented with awards in the presence of respected HOD, Dr M. Pushpalatha.

The vertical logo completion titled "NLP Logo Designing Contest" was held across the school of computing and organized by the advanced multilingual computing research group on the 3rd of April 2022 and the first place was bagged by Mr. Dhinakar (II year- C.Tech).

Shubham Gupta (RA2011003011115) II year F2 section, has completed STTP on "Mern stack Development MSD 2022" conducted by CTECH department. He is also certified for online courses on "Getting started with Git and Github " from and "Introduction to cloud computing" from coursera.

Chetas Shree Madhusudhan (RA2011003011120), III B.Tech (CSE- CORE) - G2 Section Participated in Code For Good, CFG'22 conducted by JP MORGAN HACKATHON and won FIRST PRIZE - iPad along with Goodies and got an Internship offer.

Chetas Shree Madhusudhan (RA2011003011120), III B.Tech (CSE- CORE) - G2 Section Participated in AloyHacks 2022 Major League Hacking Hackathon and won the Hackathon under the "X Marks the Spot" category in #AloyHacks2022 by #mlh and received Snapchat spectacles 3 as a reward from Snapchat Inc.

Abhirup Mandal (RA2011003011105) II year F2 section He has received NVIDIA DLI certificate for the successful completion of "Building Real-Time Video AI Applications" and "Fundamentals of Deep Learning".

Ms. Shiristi Gupta (RA2011003010878) who is studying 3rd year Computing technology participated in SmartIndia Hackathon held at Chandigarh University from 25-08-22 to 26-08-22 and won first prize of Rs. 50000.

Ashutosh Sharma (RA2011003011084) II year F2 section received the NVIDIA DLI certificate for the successful completion of "Building Real-Time Video AI Applications" and "Fundamentals of Deep Learning".



Six students from School of Computing participated in the Smart India Hackathon (SIH) under a problem statement by Department of School Education & Literacy (DoSEL), Ministry of Education and won the finals. The Team created an educational platform that empowers students with special needs. Educazy connects them with the world of mainstream education systems by breaking barriers, opening new doors of opportunities and creating awareness. It provides a digital infrastructure to address the needs of these students and gives them everything they need to study independently, just like every other child, so that they too can step up and build the foundation of their future. Mr. Viraj Agarwal from III year CSE –D2 section is one among them.

Mr. Sarvottam kumar mishra (RA2011003010863) who is studying 3rd year Computing technology scored AIR-5 in a FinTech Analytics , an event organized by the IFSCA. He got selected in the interview round and would be interning at the IFSCA headquarters, GIFT city for a period of two months with stipend of Rs.40000. The IFSCA is a unified authority for the development and regulation of financial products, financial services and financial institutions in the International Financial Services Centre (IFSC) in India. He is involved in many projects like Web3: Business model, Technology stack , Governance and Cyber Security Considerations.

Yuvraj Purkayastha, student of second year participated in the 24th West Bengal State Karate Championship 2022 in the open category and got selected for the chain of nationals and got registered under Karate India Organization which is further recognized by the International Olympic committee and World Karate Federation under the player registration number KAB-0323. He also won the 2nd District Championship in West Bengal Siliguri, which is an affiliated championship under Karate India Organization, Gold in Kata and Bronze in Kumite. He won both medals in open category.

Three students from C.Tech Arya Kesarwani, Utkarsh and Tanya Sinha participated in SIH. The problem statement was Deep learning based cyclone intensity estimation using INSAT-3D IR images. The deep learning model which takes IR images as user input and gives the speed of the cyclone which was detected in knots and also gives the intensity range of the cyclone. The 2nd day hackathon was a rollercoaster ride. The students went to Gujarat Technical University, Ahmedabad for the hackathon. The team won the Cheer up Prize of Rs.25,000.

On the account of Engineer's day, four events were planned and conducted on 1& 2 September, 2022. On 1st September, 2022 forenoon total of 10 teams participated in Team Quiz consisting of 2 members. A total of two rounds were conducted out of 10 teams and 6 teams were qualified for round 2 based on their score and average time to answer .In the second round one winner and 1 runner were selected.

On 1st September afternoon a total of 16 participated in technical content writing which includes Students and Research Scholars. Each participant has 40 minutes to complete their writing on the topic 'RECENT TRENDS IN COMPUTING TECHNOLOGIES'. Out of all participants, 1 winner and 1 runner were selected.



On 2nd of September, 13 students participated in a coding contest. The event was conducted on Hacker rank platform and participants had 120 min to submit their solution. Out of all participants 1 winner and 1 runner were selected based on their scores. All the winners are honored with prizes on 15th September 2022.

A submission from our student - Rohit Singh (RA1911003010745) to Great Investment and Analytics Platform has been selected as one of the top three business cases by India SDG Business Case Team Competition Awards and Networking 2022 conducted by University of Auckland.

A team of two students RA2111003010626/ Vansh Sharma and RA2111003010635/ MD Sameer from II year J1 Section has participated in Ideathon 2022 organized by SRMIST KTR in the month of September.

RA2111003010667/ Vishal Kumar PD and RA2111003010691/ Ganesh P from II year, J1 Section have participated in Three days workshop on "Critical Thinking, Problem Solving Skills and Personality Development organized by Department of CTECH, SRMIST KTR in September 2022.

Mr Allen Jerome (Reg num RA2011003011167) and Mr Jeyanth prakash (Reg num RA2011003011166), from II year G2 section, has organized the CTECH SPORTS TECH EVENT conducted by the Department of Computing Technologies from 19/05/2022 and 21/05/2022.

Chetas Shree Madhusudhan (RA2011003011120) from II B.Tech - G2 Section along with a team of 4 students won Defence Innovation Hackathon – 2022 event titled Tracking to and fro motion of fishermen, with Team code:-SRMSW013, and Team name:- RUBIX, that was held on 20 & 21 May 2022 organized by SIIEC. In continuation, the team were asked to exhibit their work in 3 days Defence and Technology Expo at Chennai Trade Centre, Nandambakkam from 26 th to 28 th 2022.

Kondapalli Abhiram, G Ashwin, Jeyanth Prakash P, V Allen Jerome from II year B.Tech – G2 Section acted as Student Organizers of CTECH SPORTS 2022 held during 19 th - 21 st May 2022.

Mr. Ganesh Chappi with Reg num: RA2011003011170, from II year G2 section, has participated in the singing competition conducted by Sri Venkateshwara Bhakthi Channel, Tirumala tirupati devasthanams on 06/06/2022 and went on till quarter finals round.

Abhirup Mandal (RA2011003011105) and Ashutosh Sharma (RA2011003011084) of second year F2 section secured Third position in the NLP Project Expo held by Advanced Multilingual Computing Research Division of CTECH department at SRMIST.

# Research Publication

***SRMIST, Department of Computing Technologies faculty members published articles in high impact Journal as mentioned below:***

Dr.R.Manjula was one of the authors for the paper titled “ Modeling of sugarcane bagasse conversion to levulinic acid using response surface methodology (RSM), artificial neural networks (ANN), and fuzzy inference system (FIS): A comparative evaluation” in the Journal “Fuel” with an Impact Factor of 8.035.

Minu, R. I., &Nagarajan, G.(2022) A Statistical Non-Parametric data analysis for COVID-19 incidence data. ISA transactions, S0019-0578. Impact Factor: 5.911

Dr R Jeya was one of the authors for the paper titled “A novel few-shot classification framework for diabetic retinopathy detection and grading” in the Journal “Measurement: Journal of the International Measurement Confederation I” with an Impact Factor of 5.131.

Dr M Baskar was one of the authors for the paper titled “Application of blockchain methodology in secure task scheduling in cloud environment” in the Journal “Advances in Engineering Software” with an Impact Factor of 4.255.

Mrs. S.Kiruthika devi was one of the authors for the paper titled “Automate extraction of braille text to speech from an image” in the Journal “Advances in Engineering Software” with an Impact Factor of 4.255.

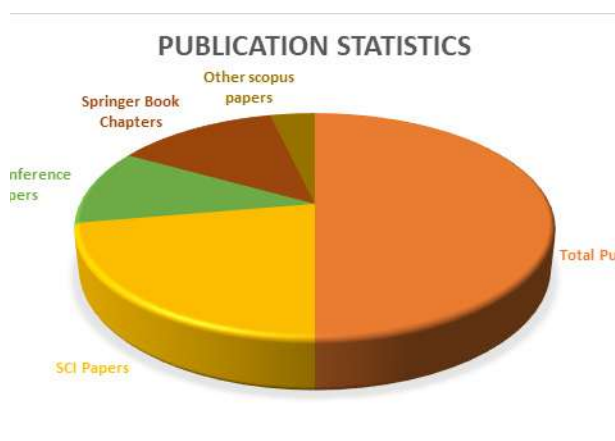
Minu, R. I., Nagarajan, G., Munshi, A., Venkatachalam, K., Almkadi, W., &Abouhawwash, M. (2022). An Edge Based Attack Detection Model (EBAD) for Increasing the Trustworthiness in IoT Enabled Smart City Environment. IEEE Access, 10, 89499-89508. Impact Factor: 3.476

## July 2022-Septemer 2022

Total Number of SCI/SCOPUS/WOS indexed paper = 65

Total Number of Indexed SCI = 26

Total Number of Indexed Scopus =39



# Faculty Achievements

*Our department faculties are striving hard to thrive the department in various ways. We are proud to list few among them*

## Consultancy Projects

Dr. R.Renuka Devi, Mr. N.A.S. Vinoth & Mrs. A. Maria Nancy has successfully completed the consultancy project from CFD Technologies for the project titled, "To supply a system for proper data compilation and management to improve the traceability and accounting of a sales and purchase of goods" for a value of Rs. 18,000 /- (Rupees One hundred and eighteen thousand only) to our prestigious organization SRM Institute of Science and Technology from Computing Technologies Department, School of Computing.

Dr. S.Nithya was awarded a consultancy project from KH International for the project titled, "Viscosity indexing in medicinal oil using artificial neural network techniques" for a value of Rs. 1,06,200 /- (Rupees One Lakh, six thousand and two hundred only) to our prestigious organization SRM Institute of Science and Technology from Computing Technologies Department, School of Computing.

## Best Paper Award

In the recently conducted IEEE CONECCT 2022 Conference ( International Conference On Electronics, Computing And Communication Technologies), SRI-B ondevice AI and RD team along with SAMSUNG PRISM collaborators from Sikkim Manipal Institute of Technologies and **SRM Institute of Science and Technology** have published and received two best paper award for the title EmoSens: Emotion Recognition based on Sensor Data Analysis using LightGBM by Dr Pushpalatha and team.



## Patent Published

Dr. M. Pushpalatha published a patent in India titled, "An Optimized Intrusion detection system for IoT Network and a Method Thereof" in the month of September 2022.

Dr Saranya P published a patent in India titled, "An Object Detection System for Detection of a Marine Object and a Method Thereof" in the month of July 2022.

Dr. Suresh Anand M published a patent in India titled, "IOT based Wearable Health Monitoring and Assisted Living of Elderly People" in the month of July 2022.

Mr. M.Karthikeyan & Dr.B.Arthi published a patent in India titled, "A Lane Detection System of Self-Driving Vehicle for Over- Speeding Detection and Method Thereof" in the month of July 2022.

Dr. B. Prakash, published a patent in India titled, "Fully Automatic Laddu making and counting machine" in the month of July 2022.

Dr. Kishore Anthuvan Sahayaraj published a patent in India titled, "IoT Smart Intelligence Chat Bot on Surgery Assistance And Reference to Improve Hospital Safety Management System" in the month of July 2022.

Dr.K.Alice, Mrs. P.Reunka Devi & Mrs. R.Brindha published a patent in India titled, "Artificial Intelligence and IoT Based Intelligent Automation (Home) using Wi-Fi and Android Applications" in the month of July 2022.

Dr.Nithiya S published a patent in India titled, "Virtual Reality Based Training Methodology for Para Sports" in the month of August 2022.

Mrs B.Ida Seraphim, Dr.P.Akilandeswari, Ms.Shreya Raghuvansh & Ms.Yashasvi Misra published a patent in India titled, "Method and System for Real Time Pedestrian Detection" in the month of September 2022.

Dr.R.Jeya published a patent in India titled, "'A System and a Method for Classification of a Dataset Using Multiple Artificial Neural Networks'"

Mrs.D.Vanusha & Mr. Sibi Amaran published a patent in India titled, "Artificial Intelligence for Wireless Caching: Schemes, Performance and Challenges" in the month of August 2022.

Dr.Jothi Kumar C & Dr.K.pradeep Mohan Kumar published a patent in India titled, "A System and a Method for Determining an Optimal Path to communicate Data Between Nodes" in the month of August 2022.

Dr. M. Suganiya, published a patent in India titled, "A secure IOT Data Sharing Based on Deep Reinforcement Learning" in the month of August 2022.

Mrs.D.Vathanapublished a patent in India titled, "IOT Driven Water Quality Monitoring System and removal of Foul Smell from Wastewater" in the month of August 2022.

Mrs.Jayapradha J published a patent in India titled, "A Location-Based Alerting System and a Method Thereof" in the month of September 2022.

Dr.Pandian A, published a patent in India titled, "Neural Network based Plan-Cancer method for primary diagnosis of Mesothelioma Cancer" in the month of September 2022.

Vijayakumaran C Published a patent named A Secure Blockchain based Agricultural Data Exchange and Monitoring system Date of Publication: 16/09/2022

Minu, R. I., Digital saline liquid level monitoring and alerting device with dual side saline bag hanging hook – Designed Patent Granted

M.Kanchana IOT Dataset Authentication Spending Machine-Learning Practices for Traffic Anomaly Recognition- Patent Published on 16.09.2022.

AMJ Muthu Kumaran Friendliness Based Trustworthy Management for secure communication in SIOT, Patent published on 16/09/22.

A.Devipriya Published a patent named "Precise Diagnosis Of Liver Lesion Using Machine Learning Techniques" on 05/08/2022.



Dr. K. Sreekumar published a patent in India titled, "Car Number Plate Detection and Extraction Using Deep-Learning" in the month of September 2022.

Dr.R.Subash, Dr.R.Jebakumar, Dr.A.M.J.Muthu Kumaran & Dr.S.Saravanan published a patent in India titled, "Friendliness based Trustworthy Management for Secure Communication In SIOT" in the month of September 2022.

Dr.K.Alice, Mrs. P.Reunka Devi & Mrs. R.Brindha published a patent in India titled, "Discover for brain tumors using BTDJPEGAB Model" in the month of September 2022.

Dr Saranya P&Dr.Umamaheswari KM published a patent in India titled, "A System for Screening Retinal Fundus Images for Proliferative Diabetic Retinopathy" in the month of July 2022.

## Faculty Upskilling

Ms.J. Brikilal has successfully completed online certification titled, "Technology enabled learning and Life-Long self-learning" from National Initiative for Technical Teachers Training, AICTE in July 2022.

Dr.R. Manjula has successfully completed the Industry Institute Certification with MATLAB for 30 hours from MathWorks.

Dr.R. Manjula has successfully completed a course "Machine Learning to Deep Learning: A Journey for Remote Sensing Data Classification (Online Course)" from IIRS-ISRO Dehardun, India.

Dr.S.Gnanavel completed the following four online course

1. Oracle certified Foundations Associate
2. Introduction to Quantum Computing – IBM,
3. Data analysis with Python -IBM,
4. Fundamentals of Quantum Computing – The Linux Foundation

Dr.V.V.Ramalingam has acquired certificate of completion for AWS Academy Graduate- AWS Academy Cloud Foundation a 20 hours course.

Dr. Vijayakumaran C pursuing NPTEL course on Introduction to Machine Learning – KGP, Period: 19/07/22 to 24/09/22 (8 weeks).

Dr. A.Devipriya Completed course on "Building Real-Time Video AI Applications" @ NVIDIA Deep Learning

Institute, Certificate, and Issued On: September 23, 2022.

Dr. B.Kanisha completed a course on "Machine Learning to Deep Learning: A Journey for Remote Sensing Data Classification", Certifying Agency : ISRO-IIRS, Period : 4/7/2022- 8/7/2022.

Teaching Pedagogies for our Faculty members of School of Computing was conducted under following topics

Effective Strategies for Teaching CS courses and High impact skills on 20.08.22

How to handle Practical Component on 10.09.22

How to Reach the students through Academics on 24.09.22

Minu, R. I. attended Six days FDP on "Mixed Reality In Engineering Education" from 21st November to 26th November 2022.

Dr.S.Babu,A.Sreekumar attended "Short Term Training Program on Programming for Problem Solving" from 27.07.2022 to 10.8.2022 – School of Computing in association with CodeTantra Tech Solutions Pvt Ltd.

P. Madhavan ,S.Ramamorthy and Aruna M attended Six Days Workshop on "HOW TEACHERS CAN MAKE A DIFFERENCE" from 8/8/2022 to 13/8/2022 – School of Computing, SRMIST in association with IIT, Madras.

Rajalakshmi M ,A.Devipriya, AMJ Muthukumaran , M Sindhuja and Vijayakumaran C attended FDP on Computer Vision and its Applications, 22nd – 27th August 2022, SRM Institute of Science and Technology.

S.Ramamoorthy attended Amazon-AWS Innovate International Conference from 23rd to 25th August -2022, Organized by Amazon AWS.

S.Ramamoorthy attended Dell Technologies Forum-2022, Online Conference on 25th August-2022, Organized by Dell Technologies, India.

S.Ramamoorthy organized an Alumni Talk, Titled "Magical Path toward Successful Placement Journey", on 10th September 2022 under the CTECH Department, school computing, SRMIST.

B.Arthi ,A. Devi priya ,G K Sandhia , Sreekumar K and Aruna attended One week FDP On "Amazon Web Services" Organized by Department of Computer Science and Engineering, Dayananda Sagar University, Bengaluru in collaboration with BRAINOVISION SOLUTIONS INDIA PVT.LTD & ALL INDIA COUNCIL FOR TECHNICAL EDUCATION – AICTE, during the period of 22/08/2022

B.Arthi attended Two weeks AICTE Training and Learning (ATAL) Academy FDP on "Internet of things" from 12.9.22 to 23.9.22 in Hybrid mode, organized by Department of Electronics and Communication Engineering SRM Institute of Science and Technology, Vadapalani Campus in association with Nokia Solutions and Networks Ltd and IET Chennai Local Network.

B. Arthi attended Acted as an organizing member of Two day National workshop on "Deep Learning for Video Analytics" organized by SRM IST in association with NVIDIA Deep Learning Institute from 22/09/2022 – 23/09/2022.

AMJ Muthu Kumaran Attended FDP on "Recent Trends on Graph Algorithm- NP complete and beyond" from 16th to 22nd August -2022, conducted by CTech Department SRMIST.

AMJ Muthu Kumaran , G K Sandhia and M Sindhuja Attended workshop on "National International Property Awareness Mission" on 18th August-2022, Organized by Ministry of commerce and Industry, Govt of India.

A.Devipriya and Aarthi B attended National workshop on "Deep Learning for Video Analytics" organized by SRM IST in association with NVIDIA Deep Learning Institute from 22.09.2022-23.09.2022.

A.Devipriya attended FDP on "Information Security: Analytics Tools, Use Cases and Demo" organized by Vellore Institute of Technology, Chennai from 05.08.2022 – 06.08.2022

A.Devipriya attended FDP on Artificial Intelligence and its Applications organized by NIT Warangal from 18.07.2022-29.07.2022

A.Devipriya attended Insights and Open Challenges in Computing Technologies organized Sri Sai Ram Engineering College from 11.07.2022-15.07.2022

Aruna M attended Two weeks AICTE Training and Learning (ATAL) Academy FDP on "Internet of things" from 12.9.22 to 23.9.22 in Hybrid mode, organized by Department of Electronics and Communication Engineering SRM Institute of Science and Technology, Vadapalani Campus in association with Nokia Solutions and Networks Ltd and IET Chennai Local Network.

B.Kanisha attended Six days FDP on "Virtual reality development using Unity" organized by Center for immersive technologies , SRMIST, Kattankulathur

Dr.V.Deeban Chakravarthy have undergone a 3 months training on Devops as a part EPAM Center of Excellence(COE-2022) Program from May 2022 To Aug 2022@ EPAM Hyderabad, and completed successfully with a performance grading of Excellent.On 23.08.2022,

Saminathan S has successfully completed Professional Certificate Google IT Automation with Python on the coursera platform. This is a six-course certificate, developed by Google.

Saminathan S has participated in the Eight-Day Faculty Development Program on Research, Publication and Patent in Humanities and Sciences, for faculty and researchers, organized by the Department of English and Other Foreign Languages, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600089, from 22nd to 30th August 2022.

Saminathan S has participated in One Week Online Faculty Development Programme on "21st CENTURY SKILLS FOR TEACHING & LEARNING (CSTL-2022)" organized by the Department of Computer Science and Engineering of GMR Institute of Technology from 16th to 20th August, 2022.

K.R.Jansi has received certificate of participation in five days virtual faculty development program on "Exploring Augmented reality/virtual reality using unity tool" held from 11 th july to 15 th july at Sri sairam institute of technology, chennai.

Dr Malathi D attended 2 weeks Industrial Training Program on Deep Learning for Computer vision and Robotics.

**8 TED Talks to watch in your 20's**

- 1. Inside the mind of a master procrastinator**
- 2. How to gain control of your free time.**
- 3. The first 20 hours - How to learn everything**
- 4. My Philosophy for a happy life.**
- 5. The secret of becoming mentally strong**
- 6. what makes a good life?**
- 7. 7 ways to make a conversation with anyone.**
- 8. Why humans run the world.**

## Faculty External Activities

### Resource Person

Dr.S.Gnanavel delivered a guest lecture at CSIR Sponsored Two days National Level Seminar on "Computational Intelligence and its Application", Sathyabama Institute of Science and Technology, Chennai on 12.07.22-13.07.22.

AMJ Muthu Kumaran delivered a Technical Lecture on "UML Diagrams" for MCA Department, Ethiraj College for women (Autonomous), Chennai on 2.08.2022

Dr. Manoj Kumar Rana served as a mentor for "The NS-3 Network Simulator Project" during Google Summer of Code 2022 from 20.05.22 to 19.09.22

Dr.K. Vijaya has been appointed as Adjunct faculty by upGrad Education Private Limited, Bangalore for the duration from 07.07.22 to 08.10.22. As adjunct faculty, she needs to be available to provide a set of teaching material on the topic Memory of the Computer Organization and Architecture Program delivered in text, photographic, audio, visual or audio-visual format, to the complete satisfaction of Upgrad Campus.

Dr.R.Anto Arockia Rosaline delivered the topic "Design Thinking" in the FDP "Impact of Artificial intelligence in the field of Engineering organized by the Department of Electrical and Electronics Engineering, Vels Institute of Science Technology and Advanced Studies, Chennai on September 26th 2022.

Dr.Vidhya R was awarded as "Academic Excellence Award " by TRP Academic Awards for the year 2021-2022.

### Reviewer

Ms.J.Brikilal has received Certificate of Recognition as a Reviewer from IEEE ACCESS Journal, August 2022.

Mrs.B.Ida Seraphim is a Peer reviewer for the papers in the journal "IEEE Transactions on Network and Service Management".

S.Ramamoorthy Nominated as a Reviewer by Tata McGraw Hill Education Publisher to review the New edition book Titled "Mastering Cloud Computing" by Professor Raj Kumar Buyya, Professor Christian Vecchiola, and Professor S. ThamaraiSelvi.

Dr M Suchithra was appointed as Question Paper Setter for the End-Semester Exam of Shri Vishnu Engineering College for Women (Affiliated to JNTU), Bhimavaram-534202, AndhraPradesh.

### E-Content

Ms.Briskilal has associated herself in LMS content preparation for Online Distance Education, SRMIST and taking live classes for "Introduction to Data Science" from September 2022 to December 2022.



Dr.Vidhya R was awarded as "Academic Excellence Award " by TRP Academic Awards for the year 2021-2022.



## Faculty Event Participation

Dr.P.Nancy, Dr.D.Shiny Irene, Dr. Thilagavathy R & Dr. Anitha K, has participated in a 40-hour Online Faculty Development Programme on “Machine Learning in Science and Engineering: Models and Applications” sponsored by Ministry of Electronics and Information Technology(MeitY)GoI organized by E & ICT Academy, NIT Warangal and S.A. Engineering College, Chennai during 27.06.22 to 07.07.22

Dr.S.Gnanavel participated in 3 days FDP on “Emerging Cloud Technology” 05.07.22 to 09.07.22 organized by Rajalakshmi Engineering College.

Dr.S.Gnanavel participated in 5 days FDP on “Exploring Augmented Reality / Virtual Reality using Unity Tool ” from 11.07.22 to 15.07.22 organized by Sai Ram Institute of Science and Technology in association with CSI.

Dr.S.Gnanavel participated in the event titled “National Intellectual Property Awareness Mission” on 22.07.22 organised by Intellectual Property Office,India.

Dr.B.Kanisha & Dr.D.Shiny Irene participated in Six Days Faculty Development Program on “Virtual Reality Development using UNITY from 27.07.22 to 05.08.22 organized by Centre for Immersive Technologies(CIT), SRM Institute of Science and Technology.

AMJ Muthu Kumaran attended workshop on National Intellectual Property Awareness Mission on 18.08.22, Organized by Ministry of commerce and Industry, Govt of India.

Dr.R.Manjula participated in Professional Development Program on MATLAB and LabVIEW Programming for Engineering Applications from NITTR Chennai.

AMJ Muthu Kumaran has attended a Six days FDP on “Computer Visions and its applications” from 22.08.22 to 27.08.22 .

Dr.G.K.Sandhia participated in IP Awareness/ Training program which was held on 18.08.22 organized by Intellectual Property Office, India.

Dr.G.K.Sandhia Participated in One Week FDP on “Amazon Web Services”, organized by Sri Krishna College of Engineering and Technology, Coimbatore in collaboration with BRAINOVISION SOLUTIONS INDIA PVT.LTD, AICTE from 22.08.22 to 27.08.22.

Dr.Anto Arockia Rosaline attended the webinar on Design Thinking-Leveraging Design Thinking for Customer Development organized by School of Design Thinking,Chennai on July 15,2022.

Dr.R.S.Ponmagal attended workshop on “High Performance Computing and its Multidisciplinary Applications” conducted by NIT, Meghalaya and IIT, Kharagpur under the aegis of National Supercomputing Mission from 22.08.22 to 27.08.22

Dr.R.Thilagavathy has attended a Faculty Training Program on “Journal Citation Reports” by Clarivate during July,2022 and got the Journal Citation Report Certificate for the successful completion of JCR Certification Series -2022 on 10 th August,2022.

Dr. M. Aruna and Dr.B.Arthi have attended One week FDP On “Amazon Web Services” organized by Department of Computer Science and Engineering, Dayananda Sagar University, Bengaluru in collaboration with BRAINOVISION SOLUTIONS INDIA PVT.LTD & AICTE, during the period of 22.08.22 to 27.08.22.

Dr.B.Arthi has attended Two Weeks Online International FDP on “Computer Vision and Natural Language Processing”, Organized by Department of Information Technology, Easwari Engineering College, Chennai from 08.08.22 to 19.08.22

Dr. B.Arthi and Dr.M.Aruna have attended Two weeks AICTE Training and Learning (ATAL) Academy FDP on “Internet of things” from 12.9.22 to 23.9.22 in Hybrid mode, organized by Department of Electronics and Communication Engineering SRM Institute of Science and Technology, Vadapalani Campus in association with Nokia Solutions and Networks Ltd and IET Chennai Local Network.

STTP on Artificial Intelligence for Computer Vision Application (AICVA 2022) was conducted in Blended mode from 25.07.22 to 30.07.22. Dr. B. Baranidharan, Dr.Ramesh, Dr.M.Suganiya, Dr.G.Padmapriya, AMJ Muthu Kumaran, Dr.R.Anto Arockia Roselin, Dr.P.Nancy have attended the workshop.

Dr.Godfrey Wilsten, Dr.A. Senthilkumar, AMJ Muthu Kumaran, Dr. Arunachalam, Dr.Kishore Anthuvan Sahayaraj, Dr.P.Nancy, Dr.D.Shiny Irene

have attended six days FDP on “Recent trends in Graph Algorithm, NP-Complete and beyond” from 16.08.22 to 22.08.22 conducted in SRMIST, Kattankulathur Campus.

Dr.R.Anto Arockia Rosaline participated in the IP Awareness/Training program under National Intellectual Property Mission on July 20,2022.

Dr.M.Sureshanand has attended Five days virtual FDP On “Insights and Open Challenges in Computing Technologies”, From 11.07.2022 to 15.07.2022 organized by, Sri Sairam Engineering College, Chennai.



## Books Published

Dr. S. Pradeep Dr. T. Senthil Kumar Dr. R. Jeya Published a book titled “Introduction to Web Technology” with ISBN: 9789356253681

Dr.R.Thilagavathy has Co-authored and published a textbook “Data Mining & Data Warehousing”; ISBN-13 :979-8888050521, by Notation Press.

Mrs.B.Ida Seraphim Published a book, “Fundamentals of cloud computing” under SIPH publishers.

S.Ramamoorthy Book Chapter Titled, “Defending IoT Security Infrastructure with the 6G Network, and Blockchain and Intelligent Learning Models for the Future Research Roadmap”, Published in IGI Global, Indexed in Scopus July-2022.

Vijayakumaran C authored a text-book on “Machine Learning”, Co-authors: Dr.V.RameshBabu, and Dr. P.B. Edwin Prabhakar Jupiter Publications Consortium, Chennai, ISBN: 978-93-91303-37-2

“Cryptography, Network Security and Cyber Law” Authors: Dr. P. Vijayakumar Dr. A.V. Bharadwaja Mr. Madhu Mr. Karthikeyan

S.Ramamoorthy Book Chapter Titled, “Defending IoT Security Infrastructure with the 6G Network, and Blockchain and Intelligent Learning Models for the Future Research Roadmap” and “Security and Privacy of Unmanned Aerial Network Communication Systems in 6G Networks”, Published in IGI Global, Indexed in Scopus July-2022.

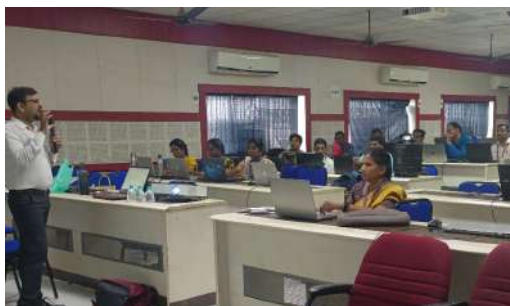
## FDP/Workshop Organized

SRMIST in association with NVIDIA Deep Learning Institute organised “Two days National Workshop on Deep Learning for Video Analytics” from 22.09.2022 to 23.09. 2022 faculties from School of computing have participated and event has been coordinated by Dr Niranjana



Dr.S.Poornima has organised a Six days Short Term Training Program on “Mern Stack Development” from 08.08.22 to 13.08.22, faculties from School of computing have participated.

Six Days Workshop on “How Teachers Can Make A Difference”, organized by School of Computing, SRMIST, KTR in association with IIT, Madras from 08.08.22 to 13.08.22, faculties from School of computing have participated.




12 days STTP program on Programming for Problem Solving organized by Department of Computing Technologies for all Faculty Jointly with Codetantra Tech Solutions Pvt. Ltd, faculties from School of computing have participated and event has been coordinated by Dr Niranjana

Three days’ workshop on “Quantum Computing-WQC 2022” from 03.08.22 to 05.08.22 Organised by Department of Computing Technologies. faculties from School of computing have participated.



A Three days workshop on “ Critical Thinking, Problem Solving Skills and Personality Development” was conducted for students. Dr.B.Pandeeswari from Department of Computing Technologies Organised the workshop. Mr.S.Jebamalai, Founder , Y –Think LearningAnnex,Chennai was the resource person and a total of 51 II year B.Tech students from School of Computing, SRMIST participated and benefitted from the event .





Dr. T. Manoranjitham, Department of Computing Technologies, organised a three-day workshop on “Hardware, Networking, and Troubleshooting” for programmers from the School of Computing in Turing Hall, Tech Park 8th floor, from September 14th to September 16th, 2022.



Data Science community, in association with the School of Computing, SRMIST, The Enigma Coding and Blockchain Club SRM conducted a hackathon, Data Science Hack 2022 from 01.09.2022 to 04.09.2022. Mrs. B Sowmiya and Mrs. Ida Seraphim of Computing Technologies Department were the conveners of the event. There were active participation of more than 850 participants and registration of more than 120 teams.

A STTP on “Artificial Intelligence for Computer Vision Application” (AICVA 2022) was organised by Baranidharan B, Department of Computing Technologies conducted in blended mode from 25 th July 2022 to 30 th July 2022



Dr.P.Selvaraj , Department of Computing technologies has organized the 3 days Workshop on Developing Applications with Natural Language Processing during 20.7.22 to 22.7.22. There were 70 participants attended this workshop which includes research scholars, final year B.Tech students, programmers faculty members. This workshop has provided the basic to advanced knowledge about NLP with well-planned hands-on sessions on various NLP applications.

Orientation session for “Event Convenors/Coordinators of CTech Department ”was organized by Dr.Jansi on 2nd August 2022.

Two days National Workshop on Deep Learning for Video Analytics” from 22.09.2022 to 23.09. 2022 organised by Dr Niranjana

12 days STTP program on Programming for Problem Solving was organised by Dr Niranjana



“There are different ways to do innovation. You can plant a lot of seeds, not be committed to any particular one of them, but just see what grows. And this really isn't how we've approached this. We go mission-first, then focus on the pieces we need and go deep on them and be committed to them.”

-Mark Zuckerberg

# Club Activities and Achievements

## E-Cell, SRMIST in the advanced track of National Entrepreneurship Challenge

Entrepreneurship Cell is essential for any college because it develops students' entrepreneurial spirit, which is instrumental for our country to develop. NEC is the platform that helps colleges to build an actively functioning E-Cell. It's a 6 month-long competition.

Created with the idea of developing entrepreneurship from the grassroots, NEC plans to promote entrepreneurship among the nation's younger generation and to ensure that youngsters don't feel that starting up a company is rocket science. National Entrepreneurship Challenge plans to develop entrepreneurship developing bodies in each student campus in India. It is the first of its kind pan India challenge.

E-Cell, SRMIST after exceptional performance in the basic track of NEC 2020-21 and securing 4th rank All Over India among 350+ teams, they are ready for the advanced track of NEC 2022-23.

## Research Club



Research is the driving force of educational institutions. In Computing Technologies, to recognise the importance of research and to provide various opportunities for students and faculty. Ctech Research Club was Inaugrated by. Dr.Subhalalitha On 28th August.

CTECH RESEARCH CLUB organized a Discussion on "Writing a review and implementation paper for journal" for the benefit of the students. The Hands on session was delivered by Ms.Joan C Muthu.



## Campus Quest

Campus quest is a team challenge combining treasure hunt and capture the flag. The main objective of the game was to make the first-year students explore the college campus and to check their coding skills. We shortlisted 25 teams from all the submissions. The game was enjoyed by everyone as it was spread across the campus area. The team "Teen Coders" won the game. They were the best combination of coders and finders. The event ended with vote of thanks by the Club President. The winning team was awarded by a cash prize of 3,000. All the other participants were given cans of red bull. But as it's said, all good things come to an end we bid the participants with a happy heart!



## Professional Society Activities



### IE(I) STUDENTS' CHAPTER certificate of membership

IE(I) STUDENTS' CHAPTER, Department of Computing Technologies, SRM IST, Kattankulathur received the official IE(I) STUDENTS' CHAPTER Certificate of Membership for all the students on 1st August -2022.

### Full Stack Development With DevOps ( AWS, Docker, Kubernetes)

On the first day of the workshop, topics such as 5G, java programming, and creating an 'AWS' account and instance were discussed. All participants were given a google drive link where recorded tutorials for the workshop were uploaded, and 10 groups of 8 participants were formed so that they could work as a team to install software such as spring and putty to work. The students got to know, how to use AWS.

Topics such as creating an 'AWS bucket' to host an online Java application and the concepts of server and client were thoroughly discussed. Software such as postman, visual studio code etc was also installed. Xampp was installed according to the instructions and then information about POST, GET, PUT, DELETE, UPDATE commands were discussed.

The day started with the topic, "The Introduction to React and its component", and "React vs Angular JS". Then the Real-world application of React was given. A case study based on "Real world applications like Facebook and Google" was done and Development of applications were also done. Development of application using AWS" was started and completed. Then finally the "Management of containerized workloads and services using Kubernetes and Docker" was completed.

"Software innovation, like almost every other kind of innovation, requires the ability to collaborate and share ideas with other people, and to sit down and talk with customers and get their feedback and understand their needs.."

- Bill Gates



## Higher Studies and Job Opportunities at USA

Mr. Arumugham Arvai, Director of Engineering, Pasadena, California, USA addressed all the students present in the Techpark 8th floor Turinghall and highlighted the HIGHER STUDIES AND JOB OPPORTUNITIES AT USA on 01-08-22. He mentioned about the vital role Indian students play in USA. When it came what Indians study in USA, 78% students choose to study STEM, 11% choose Business and Management, 3% choose Social Sciences and the remaining opt for any other fields.

He quoted some examples of some exemplary personalities from India who studied in the states and are now at some powerful positions. Some of those mentioned are:

- Aravind Krishna - CEO of IBM – PhD from Univ. of Illinois Urbana Champaign
- SundarPitchai – CEO of Alphabet – MS from Stanford
- SatyaNadella – CEO of Microsoft – MS – Univ. of Wisconsin
- Shantanu Narayan – CEO of Adobe Acrobat – MBA UCB

He concluded with an overall note about USA that they are still very particular about white employment over any other. USA supports India's emergence of global power. USA has Quad leadership with Japan and Australia. It has strong people to people ties with educational exchanges. It is very much committed to democracy and rule-based society.



### OnClone WEB-DEV

The speakers made a Spotify clone website with pure HTML, CSS and JavaScript. It was a very beginner friendly Hands-on Workshop. At first Pradipta explained and worked on the front-end part of the website using HTML and CSS. Then came Satvik, who worked and explained the basic Javascript part, to have a good introduction to the language for beginners. Then Saptorshee integrated the backend and frontend with functions to complete the website creation.



## ACM Chapter

### Workshop on Entrepreneurial Skills and Attributes for Success of Startup

A life skill workshop on “ Entrepreneurial Skills and Attributes for Success of Startup” on 27th Aug 2022 and 17th September 2022 which was jointly organized by the Departments of Networking and Communications and Computing Technologies in association with the ACM-W Chennai Chapter. The workshop was organized for the undergraduate, postgraduate students and research scholars across the institute, who are aspiring to upskill their entrepreneurial skills and talents. The facilitator was Ms.Vidya Venkatesh, Counselling Psychologist, Care in Crisis, Transdisciplinary researcher, Tata Institute of Social Sciences (Banyan Academy of Leadership in Mental Health).Dr. Pushpalatha & Dr.VaishnaviMoorthy are the convenors of the workshop



“The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man.”

- George Bernard Shaw

# Research Verticals

## Accelerated Computing

R.S Ponmagal , R Jeya and K R Jansi attended workshop on “High performance computing and its Multidisciplinary Applications” organized by National Institute of Technology Meghalaya and Indian Institute of Technology Kharagpur.

R.Vidhya attended workshop on “Bio-statistics with statistical software” organized by Department of Statistics at SRMIST for the period 22nd August 2022 to 26th August 2022

S.Nagadevi planned for a Workshop on “ Hands on Parallel Programming ( OPEN MP,MPI,TENSORFLOW,GPU) ” on 27th and 28th October 2022

## Theoretical Computing

On 16th Aug to 22nd August – Faculty Development Program was Organised by Dr. K.senthilkumar on “Recent trends in Graph Algorithms, NP Complete and Beyond”.

Graph algorithms are the fundamental problems in the analysis of relational data and also used to address real-world problems in which it represents the problem area as a network like telephone networks, circuit networks, and social networks. The class of NP-complete is very important and more interesting class of problems in the field of computer science. NP-complete provides a background knowledge to recognize the complex computational problems that are not solvable in polynomial time. Entire workshop was handled by Professor Dr. Venkatesh Raman, Dr. Ramya, Dr. Sushmita Gupta from Institute of Mathematical Sciences, Dr.MeghanaNasre, Dr. Akanksha Agrawal. From IIT Madras. Various fascinating problems were discussed and tutorial sessions conducted in the afternoon. Around 30 participants from reputed institutes like, IITK;M, Anna University, IIT M and research scholars from SRMIST ET, Mathematics attended.



It is proposed to conduct a 2 hours session on “Complexity Classes” for faculty members during the month of November.

Planning to conduct STTP on “Cryptography in Quantum Computing” during the period 7-10-22 to 21-10-22.

Flipped class was conducted for couple of topics in the Formal Language and Automata Course.

## Natural Language Processing

Data Science community, in association with the School of Computing, SRMIST, The Enigma Coding and Blockchain Club SRM conducted a hackathon, DataScience Hack 22 on 1.9.2022 – 4.9.2022



## Visual Computing



Five days FDP On “Computer Vision and its Applications”, From 22.08.2022 to 27.08.2022 organized by, Visual Computing research Group, Department of Computing Technologies, faculties from School of computing have participated.

### SRMIST-PMX Join Research Collaboration - Internship

As per the Mutual Non-Disclosure Agreement (NMDA) between PMX-INC, a Multi-National Corporation (MNC) in South Korea, and the Department of Computing Technologies, SRM IST-KTR Campus, two internship projects were successfully completed by a team of 4 students from our final year – CTech. The project titled the “Development of a Deep Learning based solution for Detection of Emphysema Patterns on Lung CT images” is completed by team 1, and the second team completed the “Implementation optimization and packaging of an existing imaging algorithm for processing diffusion weighted MRI images”. The students were given the Internship Certificates for their work by the PMX team AI developer, Ms. V. Padma Priya, from South Korea. Program initiated by Dr C Vijayakumaran.



### Industry/ Academic Institution alliance

Minu, R. I. Doing Consultancy work along with ITK Solution

Minu, R. I. Collaborating with IITB for e-Yantra lab setup

A.Devipriya On discussion - A consultancy project work with Sunface Technologies, Tirupur

A.Devipriya Planning for a MoU with SKS Skills Fasteners Private Limited

S.Babu, P.Madhavan planned for a Faculty Development Programme on “Practical Aspects of ICT Tools & Online Teaching in Current Scenario” on November 2022.

## SAMSUNG PRISM

SRM Institute of Science and Technology had MoU with Samsung for Samsung PRISM, Bangalore from 2019 to 2022. Three phases of projects were completed among which 28 projects are awarded as Excellence out of 38. Currently fourth phase is going on with 30 projects and the MoU is extended for next three years. Mr. Vishukumar, Head of Samsung PRISM and Mr. Prakhar Chandrakar, Deputy Manager, Samsung PRISM had launched the PRISM projects for professors and students and had an interaction with SRM third year students on 30 th September 2022.



# Counselling Activities

## Student Counselling Cell Activities

Counselling helps students to manage their emotions better, improve focus on goals and work in a systematic manner for a better future. Department student counselling cell staff members attended six months training session on, "Training the staff as Counsellors", organized by the department of Computational Intelligence on every Saturday for one hour in two batches. The session was handled by Dr.NappinnaiSeran, Ph.D. , Psychologist, Founder of PsyHub brain and behavior clinic

Student counselling cell staff members started to address the students class by class for spreading awareness among the students regarding the importance and need for counselling. This helps the students to know that there is a supporting hands available for them in campus whenever they are in need.



## Outreach Activities

### Good Life Center Children Home, Chennai

Visited Good Life Center Children Home, Chennai on 14th August 2022 and conducted few activities.

### Government School, Arasanimangalam

Visited Government School, Arasanimangalam, on 29th, 30th of August and 1st September and conducted few activities.



SATU- One day outreach workshop was organised by Dr.Niranjana on "Multicultural Approach: An International Perspective". The Resource Person, Dr. Vishalache Bala Krishnan, Associate Professor, Faculty of education, university Malaya, Malaysia.



The Computing Technologies Department in association with Directorate of Learning and Development, SRMIST has organized a one-day outreach programme Promoting Cultural Diversity on College Campuses on 26th Sep, 2022 so as to prepare students for work in a global society. The outreach programme was organized by Dr.G.Niranjana.

On 17th sep , Mega Blood Donation Drive was Organized by NSS Team.

On 3rd sept an open house visit was organized by School of computing – SRMIST "Star higher secondary school" students visited on 3rd sept was addressed by Prof.S.Sridhar.



STTP on Computer Skills for Central Reserve Police Force (CRPF) Program was organised from 11 July 2022 to 29th July 2022 . Presidential Address was delivered by Dr C Muthamizchelvan , VC – SRMIST , Dr T V Gopal , Dean – CET, SRMIST delivered the Welcome speech , Shri M Dhinakaran, Deputy Inspector General of Police (DIG), Central Reserve Police Force (CRPF), Dr S Ponnusamy, Registrar, SRMIST felicitated the Guest of Honor, Dr Revathi Venkatraman, Chairperson, School of Computing, SRMIST shared the vote of Thanks . The event was coordinated by Dr Velmurugan and Dr Sivakumar

# Alumni Engagement

*We are proud to say that our alumini are in reputed positions in the society and we are happy to have in touch with them. Few meetings of us with our alumini:*

## How To Prepare For Higher Studies?

Ms. PoornimaRaj is a Gameplay UI Engineer at Amazon Games, San Diego, California, United States. She has a demonstrated history of working in the UI gaming industry. Skilled in game development with knowledge of Unity 3D, OpenGL, Unreal Engine 4, Lua, and 3D Math linear algebra. Strong operations professional with a Bachelor of Technology (BTech) from SRM University in Computer Science. She has given insights on the importance of higher studies and also gave the best idea on how to proceed after graduation for higher studies. She shared her journey from pursuing a BTech to pursuing a master's degree at the University of Southern California. She explained the process of higher education, in which she explained the exams for higher studies and also explained how to avail the scholarships.



## Tips to Face Technical Interviews !!



Mr. Yachit Singh is an adroit associate software engineer for the esteemed company, Optum, which is a leading information and technology-enabled health services business. He has enlightened the students on how to face technical interviews, which are inevitable for the students in the Engineering Department. Mr. Yachit has shown that with sheer will, dedication, hardwork and constant practice, one can crack these technical interviews quite effortlessly and be successful in their upcoming odyssey. The talk was organised by Dr. S. Babu, Associate Professor.

## Title: Tips to Crack Technical Interview!

Mr. Nitesh Nijhawan is a proficient Software Development Engineer at PayPal which is one of the largest online payment processors in the world. He laid out crucial tips and strategies to ace any technical interview that any aspiring candidate can keep it on his fingertip. He also provided an insight on how the recruitment process works, how to approach an interview and tackle the questions with aptness and confidence. He associated with everyone and clarified all the doubts and concerns raised by the perspective of a student's mindset. The talk was organised by Dr. B. Baranidharan, Associate Professor





## Exploring the Journey of Idea to Commercialization

Mr. J Vijay RathanLingaa a techno-legal advisor at SRM Innovation and Incubation Centre and the Founder & CEO of ASVRL P Ltd. He has a vast history of working in the education industry as an Assistant Professor in the Department of Electronics and Instrumentation Engineering, SRM University, Chennai. He has contributed to the research through new product development based on the requirements in the field of Automotive, Aerospace, Biomedical, and other customer-based needs. Skilled in Project & Innovation Management, Automotive Electronics, Automotive Sensors & Systems, New Product Development and Good understanding of Product Development Cycle. He is quite experienced in the field of research and innovation and has turned many ideas into real world commercial projects. He gave the students an insight of how to mould their research work into projects which are useful in the real world and find their application by qualitative and quantitative analysis of the needs of people in day-to-day operations and understanding the shortcomings of the current scenario in the area of research work.

Dr Ramamoorthy organized an Alumni Talk, Titled "Magical Path toward Successful Placement Journey", on 10th September 2022.

### Saturday Talk



Devendar Rao B, Research Scholar, presented a Saturday Talk on the title, "Quantum Information Processing and Quantum Machine Learning" on 16.07.2022.

P.S. Thanigaivelu, Research Scholar, presented a Saturday Talk on the title, "MATLAB Toolbox for Research" on Saturday, July 23, 2022.

Siva Mohan, Research Scholar, presented a Saturday Talk on the title, "Cyber Security and Vulnerability Issues" on 16.07.2022.

Devendar Rao B, Research Scholar, presented a Saturday Talk on the title, "Quantum Information Processing and Quantum Machine Learning" on 13.08.2022.

R. Sudha, Research Scholar, presented a Saturday Talk on the title, "Feature Engineering in Image Processing" on 20.08.2022.

Manikandan J, Research Scholar, presented a Saturday Talk on the title, "Quantum Information Processing and Quantum Machine Learning" on 10.09.2022.

Mrs. Swathi Mirthika G.L R., Research Scholar, presented a Saturday Talk on the title, "Behind the scenes of creating the worlds biggest graph database" on 24.09.2022.



# Alumni Reunion

Alumni meet with 95 96 and 97 batches. The Department meet was organized by our team members Selvin, Umadevi, Jayapradha and Subhash. Congratulations to the entire team.



## Upcoming Events

### Workshop

Hands-on parallel programming(OpenMP, MPI,Tensorflow and GPU)  
Mrs.S.Nagadevi 27-10-2022 to 28-10-2022

Awareness on Intellectual Property Rights and Successful Commercialization  
Mr.M.ArulPrakash 26-10-2022.

### FDP

Cryptography in Quantum Computing  
Dr.Godfrey Winster .S 03-10-2022 to 20-10-2022.

Six days FDP on Computer Vision Implication in Digital Twin Technologies  
Dr.R.I.Minu 21-11-2022 to 26-11-2022.

### STTP

STTP on Intelligence at the Edge  
Dr.M.Pushpalatha and Dr.Vaishnavi Moorthy 07-11-2022 to 12-11-2022.

### Hackathon

Hack2Leap 2022  
Dr.R.Jebakumar 28-10-2022 to 29-10-2022.





**குறள் 418:** கேட்பினுங் கேளாத் தகையவே கேள்வியால்  
தோட்கப் படாத செவி.

**kaetpinunG kaeLaath thakaiyavae kaeLviyaal  
thoatkap pataadha sevi**

Where teaching hath not oped the learner's ear,  
The man may listen, but he scarce can hear.

