CSE BYTES

NEWSLETTER JANUARY 2024 (VOL 7, ISSUE 1)
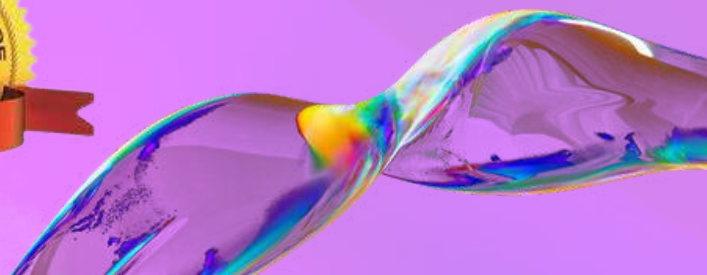
contents

ABOUT THE DEPARTMENT

The Department of Computer Science and Engineering was established in the year 1985. Over the past few years, the department has acquired national and international importance. This has been achieved by the collective and responsive effort of the faculty, the supporting staff and the students. The department is well equipped with excellent computing facilities, and has highly qualified faculty specialized in areas like Cloud Computing, Artificial Intelligence, Machine Learning, Data Analytics, Cyber Security, Networking, Data Mining etc.

Programmes offered:

- B.E. Computer Science and Engineering
- B.Tech. Artificial Intelligence and Data Science
- M.E. Computer Science and Engineering
- Ph.D. Computer Science and Engineering

VISION

To excel in providing education and research in the field of computer science and engineering in the cutting edge technology so as to produce competence professional at global level.

MISSION

- Providing competent and trained faculty members to enrich the aptitude of the student to generate innovative and effective problem solving skills with professionalism.
- Providing strong research and state of the art facility to the students to face dynamic challenges of industry and society.
- Educating the students to be successful, ethical and lifelong learners.

B.E – Computer Science and Engineering

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

- Create value to organizations as an employee at various levels, by improving the systems and the processes using appropriate methods and tools learnt from the programmme.

- Run an organization successfully with good social responsibility as an entrepreneur, making use of the knowledge and skills acquired from the programme.

- Contribute to the future by fostering research in the chosen area as an erudite scholar, based on the motivation derived from the programme.

PROGRAMME SPECIFIC OUTCOMES (PSOS)

- Ability to adapt to a rapidly changing environment by learning and employing new programming skills and technologies.

- Ability to use diverse knowledge across the domains with inter-personnel skills to deliver the Industry need.

3

B.E – Computer Science and Engineering

PROGRAM OUTCOMES (POS)

- **Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

- **Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

- **Design / Development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

- **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

- **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

- **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

- **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

- **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

- **Individual and teamwork:** Function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings.

- **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend andwrite effective reports and design documentation, make effective presentations, and give and receive clear instructions.

- **Project management and finance:** Demonstrate knowledge and understanding of the engineering management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

- **Life-long learning:** Recognize the need for and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

6

B.Tech – Artificial Intelligence and Data Science

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

Artificial Intelligence and Data Science program will prepare its graduates:

- To solve real-world issues by developing intelligent computing systems to meet the emerging technology challenges in the industries.
- To apply professional and interpersonal skills through lifelong learning such as advanced degrees and research.
- To participate in collaborative learning and become successful entrepreneurs by ensuring ethical and moral values.

PROGRAMME SPECIFIC OUTCOMES (PSOS)

- Apply the engineering concepts and evolve Artificial Intelligence-based models to solve real-world problems in various domains and deliver solutions with innovative ideas.

Apply the concepts and algorithms of various learning models for deep analysis of data to provide high-end business decisions for advancement in the data science fields.

M.E – Computer Science and Engineering

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

Computer Science and Engineering program will prepare its learners:

- To understand the foundational and advanced concepts in Computer Science and Engineering to excel in research by adapting to the rapid advances in new emerging technologies.
- To critically analyze the emerging trends and technologies and future issues at multiple levels and propose research oriented solutions.
- To effectively communicate technical information, function effectively on teams
- To provide innovative solutions to real-world problems of society by following ethical practices
- To pursue lifelong multidisciplinary learning as professional engineers and scientists

PROGRAMME SPECIFIC OUTCOMES (PSOS)

- Graduates will gain advance-level competency and skills in core and emerging technologies of Computer Science and Engineering.
- Graduates will develop viable solutions to real-world problems through continuous learning and research skills

8

M.E – Computer Science and Engineering

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

- An Computer Science and Engineering program will prepare its learners,To understand the foundational and advanced concepts in Computer Science and Engineering to excel in research by adapting to the rapid advances in new emerging technologies To critically analyze the emerging trends and technologies and future issues at multiple levels and propose research oriented solutions To effectively communicate technical information, function effectively on teams To provide innovative solutions to real-world problems of society by following ethical practices To pursue lifelong multidisciplinary learning as professional engineers and scientists

PROGRAMME SPECIFIC OUTCOMES (PSOS)

- Students Graduates will gain advance-level competency and skills in core and emerging technologies of Computer Science and Engineering. Graduates will develop viable solutions to real-world problems through continuous learning and research skills

M.E – Computer Science and Engineering

PROGRAM OUTCOMES (POS)

- An ability to independently carry out research / investigations, identify problems and develop solutions to solve practical problems.

- An ability to write and present a substantial technical report document.

- Students should be able to demonstrate a degree of mastery in the field of Computer Science and Engineering

- Use research based knowledge, methods, appropriate techniques, resources and tools to solve complex engineering issues with an understanding of the limitations.

- An ability to function effectively by applying technical knowledge, ethical practices as an individual and a team member in the career.

- Recognize the need for independent, life-long learning and engage in the broadest context of technological change.

MESSAGE FROM HOD
Dr.R.ANITHA
Professor & HoD/CS

I would like to express my sincere appreciation for all the tremendous efforts put forth by the newsletter team in the month of January 2024. This Newsletter 'CSE - BYTES' is a forum to expose the events, happenings, and achievements in the department as well as provide a platform to exhibit the talents of the budding engineers and the faculty as well. This newsletter will definitely create an impact in the minds of readers by providing a wider visibility and new dimension to the learning community. I hope that this culture of releasing newsletter will continue forever with the support from both the students and the faculty.

11

Placement Activities

ACADEMIC YEAR

2024

12

Department of Computer Science and Engineering

Placement Report – JANUARY 2024

The Training and Placement Cell (TPC) plays a vital role in the career development of students in educational institutions. It serves as a bridge between the students and the industries, facilitating the recruitment process and helping students acquire the necessary skills and knowledge to succeed in their careers. The Department of Computer Science and Engineering and Training & Placements conducts several Technical Training programmes to all students to develop their technical knowledge and soft skills in the areas of Aptitude, Logical Reasoning, Quantitative Reasoning and Verbal through the qualified and reputed faculty members. Training and Placement Cell organizes the Mock Interview for Pre Final year students by HR Managers from different industries.

13

Placed Students January 2024

JOB

S. NO	REGISTRATION NO.	STUDENT NAME	Placed Company
1	2127200501021	ARAVINDAN M	SAMCO
2	2127200501088	MANUSRIMANJARI M	SAMCO
3	2127200501125	SANJAY S	SAMCO
4	2127200502051	VISHNUVASAN T S	SAMCO
5	2127200501112	PREMSANJAYSHA G	KALERIS NAVIS
6	2127200502033	PRAVEEN RAJAN T P	NEEYAMO

14

JOB

APTITUDE TEST FOR MOCK PLACEMENTS 2024

The Forum for Economic Studies by Engineers (FORESE) organized the Aptitude Test for Mock Placements 2024 for third-year students, scheduled to take place from January 29th to February 2nd, 2024. The test will assess participants on diverse aptitude levels, including quantitative, verbal, logical reasoning, coding, and core questions. The Company allocations for the Mock Placements will be determined based on the performance in the Aptitude Test and Group Discussion. This opportunity serves as a valuable preparation for upcoming placements, providing a comprehensive evaluation of skills crucial for success in the professional sphere.

15

HIGHER EDUCATION

The Department of Computer Science and Engineering (CSE) organized a seminar on January 30, 2024, focusing on higher education opportunities abroad. The event featured guest speakers from MANYA, who provided valuable insights into the various aspects of pursuing education overseas and the job opportunities available post-degree completion. During the seminar, the representatives from MANYA discussed important information about intakes for studying abroad, shedding light on the different seasons or periods when students can apply for programs in foreign universities. This information is crucial for students planning to pursue higher education as it helps them understand the timelines and deadlines associated with the application process. Additionally, the speakers shared insights into the job opportunities that await students upon completing their degrees abroad. This included information on the global job market trends, industry demands, and the potential career paths that students can explore after obtaining their qualifications.
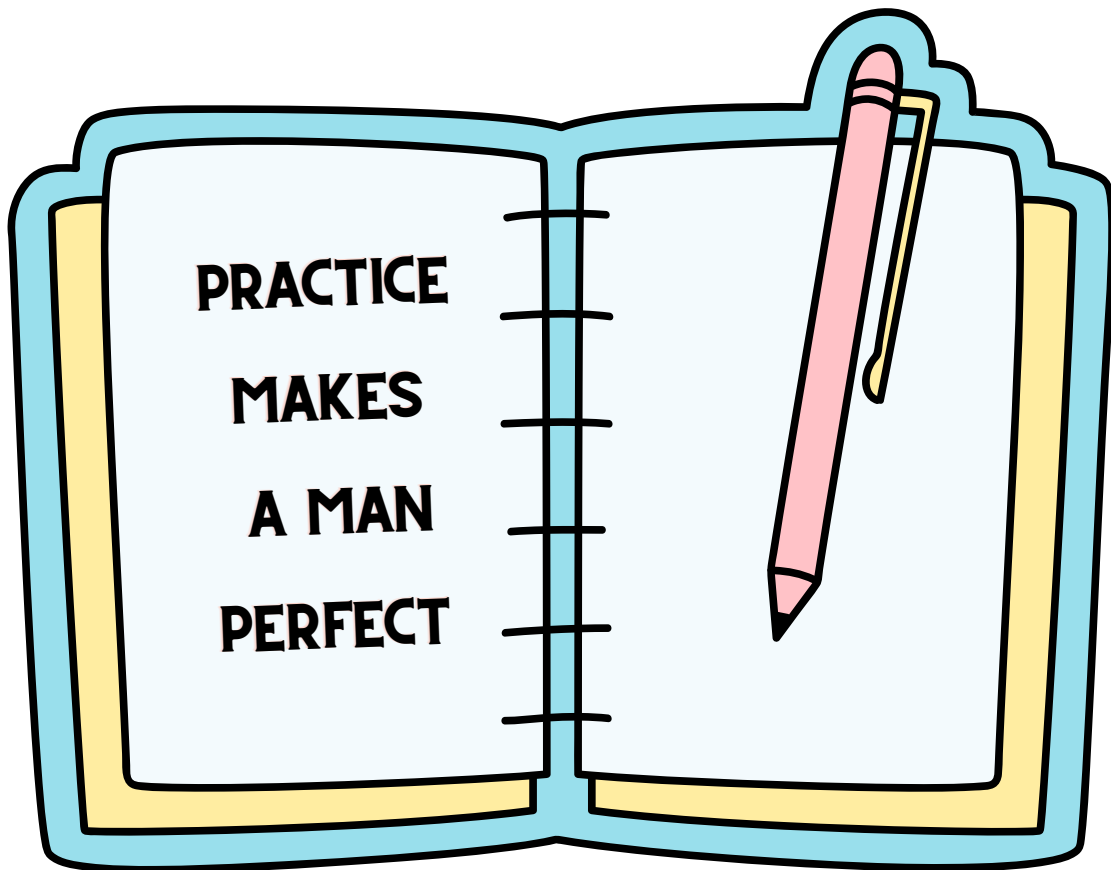
16

Placed Students January 2024

JOB

HIGHER EDUCATION

Seminar on higher education

17

STUDENT ACHIEVEMENT
ACADEMIC YEAR 2023-24

PRACTICE

MAKES

A MAN

PERFECT

Mr.SHIVAM MANOJ SHUKLA and Mr.C.SUJAY from II/CS-C, have successfully completed two-week internship from 3/1/2024 to 20/1/2024 at **Vaayusastra Aerospace Pvt. Ltd.**
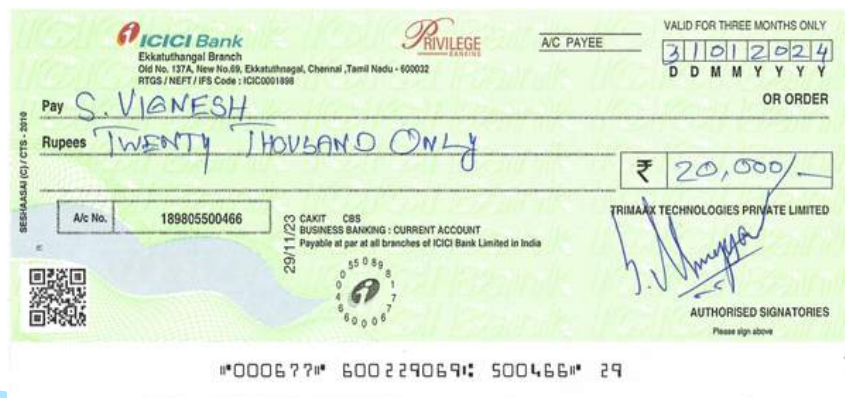

INTERNSHIP CERTIFICATE

19

Mr. VIGNESH. D and SHRI HARI. A II/CS, have Participated in the **Rajasthan Police Hackathon,** Jaipur on 17/1/2024 and 18/1/2024.

At **RAJASTHAN POLICE HACKATHON**

Mr. VIGNESH. S, ROHAN JEYAN, SIVAPRIYA. K. A, PRATHIKA. P. R and PRAVEEN KUMAR. R II/AD, participated in the contest **SOFTWARE SAVVY** conducted by **TRIMAAX Tcehnologies on 31/1/2024**.

REWARD

Ms. SAHANA. B, Mr. ADHITHIYARAM. R, Mr. SREEVATHSAN. V, Mr. MERVIN ROSOARIO. A and Mr. ARUN SOLAIAPPAN III/CS and IV/CS, have Participated in **PRIDE 2K24** cultural fest organized by **Saveetha school of Management** on 4th and 5th January.

SECOND Place in **GROUP SINGING**

- **Mr. P.S.R. RENGESH**, II/CS attended a 2 days workshop on "**Techo Workshop Series '24 – Ethical Hacking & Cyber Security with CTF Challenge**" organized by **IIT Madras, Chennai on 27/01/24 and 28/01/24.**

Mr. B. M. GIRISH KUMAR from CS secured second place in the event **MEME Creation** conducted by **ETHIRAJ COLLEGE on 23/1/2024.**

CERTIFICATE OF MERIT

TROPHY

FACULTY ACHIEVEMENTS AND INTERACTIONS

ACADEMIC YEAR 2023-2024

26

FACULTY ACHIEVEMENTS

- **Dr. R. Anitha, HOD / CSE,** participated in the Three Day Workshop on Emerging Data Engineering Technologies from 29-01- 2024 to 31-01-2024, organized by the Department of Computer Science and Engineering Sri Venkateswara College of Engineering .

- **Dr. R. Anitha, HOD / CSE,** acted as an external examiner for the UG Project B.Tech IT held on 03.01.2024 at College of Engineering, Anna University, Guindy.

- **Dr. R. Anitha, HOD / CSE,** acted as an external examiner for the PG Project M.Tech IT held on 09.01.2024 at College of Engineering, Anna University, Guindy.

FACULTY ACHIEVEMENTS

- **Dr. R. Anitha, HOD / CSE,** acted as an reviewer for the International Multiconference on Advances in Information Technology Communication & Energy Systems (AITCES-2024) held during 23.01.2024 to 24.01.2024.

- **Dr. R. Anitha, HOD / CSE,** acted as a mentor and submitted a proposal to NIRAL THIRUVIZHA HACKATHON under the Sector: Water and Soil Conservation for the problem statement Cloud-Based Dashboard for Global Water Depletion on 31.01.2024.

28

FACULTY ACHIEVEMENTS

- **Dr. J. M Gnanasekar, Prof. / CSE** acted as technical reviewer in ICCCSP 2024 8th International Conference on Computer, Communication and Signal Processing organized by the Department of Information Technology, SSN College of Engineering.

CSE-BYTES

FACULTY ACHIEVEMENTS

- **Dr. N. Rajganesh, Assoc. Prof. / CSE,** got a seminar grant of Rs. 20000 from DRDO to conduct a one day national level seminar on **"Anticipating and Proactively Resolving Emerging Cyber Security Challenges"**, 09.01.2024.

SEMINAR POSTER

30

REPORT ON SEMINAR

DRDO Sponsored One Day National Level Seminar on Anticipating and Proactively Resolving Emerging Cyber Security Challenges, Jan 09, 2024

Venue: Seminar Hall, Dr. A. C. Muthiah Central Library, Sri Venkateswara College of Engineering.

DRDO sponsored One Day National Level Seminar on Anticipating and Proactively Resolving Emerging Cyber Security Challenges was conducted on 09-01-2024 from 8.30 A.M to 4.30 P.M by the Department of Computer Science and Engineering, Sri Venkateswara College of Engineering. The seminar grant is received by Dr. N. Rajganesh, Associate Professor /CSE. The seminar is coordinated by Dr. S.D. Nandakumar, AP/CSE, Dr. S. Rajalakshmi, Associate Professor/CSE, Mr. V. Krishnamoorthy, AP/CSE.

The speakers were, Mr. Rakesh Elamaran, Cyber Security Engineer, Comcast India. Dr. P. Thiyagarajan, Associate Professor & Head, Department of Computer Science (Cyber Security), Rajiv Gandhi National Institute of Youth Development (Institute of National Importance), Ministry of Youth Affairs and Sports, Govt. of India, Sriperumbudur, Pallavaram, Thoraipakkam, Chennai.

It was a workshop which fabricated to enlighten the participants about the Cyber security, Cyber security Policy, Cyber Crimes, Cyber Security Applications, Attacks and Awareness, Cryptography and Block Chain Security, Cyber security audit and compliance, National cyber security policy and strategy. The total strength of the participants is 39 from various engineering colleges.

The Seminar began with the prayer song by the students and Dr. R. Anitha, Professor and Head/CSE welcomed the gathering and has given the welcome address. Dr. S. Rajalakshmi, Associate Professor/CSE introduced the fore noon resource person Mr. Rakesh Elamaran.
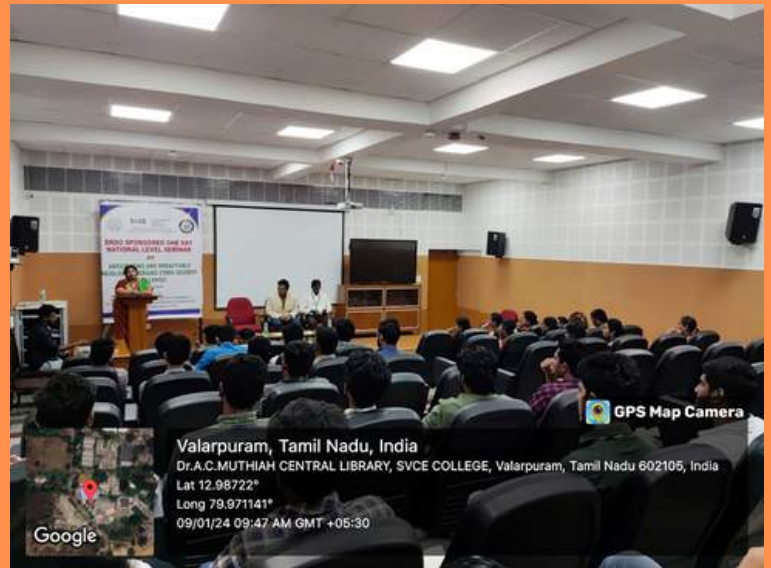
Prayer Song

Dr. Anitha, HOD/CSE
Welcome Address

Dr. R. Anitha, HOD/CSE Presented a Memento To Mr. E. Rakesh

33

Subsequently with the refreshments, Mr. Rakesh Elamaran Elamaran has given the special lecture on Overview of Cyber security and Cyber Crimes - Cyber security terminologies, Cyberspace, threat, risk, vulnerability, Cyber terrorism, Critical IT and National Critical Infrastructure. He explained everything with a real-world example for the better understanding for the participants. Thereafter, he discussed very well about Block Chain Security and its applications. Finally, the fore noon session was ended with Vote of Thanks given by Dr. S. D. Nandakumar AP/CSE.

During the afternoon, the session was takeover by the guest speaker Dr. P. Thiyagarajan. He has given his view on Data protection, Data privacy and data security, Big data security issues and challenges. Data protection regulations, Social media- data privacy and security issues, National cyber security policy and strategy are the another part addressed by the guest.

At the end of the seminar, the feedbacks were collected from the participants, certificates are distributed to the participants and the Vote of Thanks was given by Dr. N. Rajganesh, Convenor-DRDO Seminar. Finally, the seminar was ended with National Anthem.

34

Mr. E. Rakesh Content Delivery

Participants Attending Seminar

Dr. R. Anitha, HOD/CSE Presenting the Memento to
Dr. P. Thiyagarajan

35

FACULTY ACHIEVEMENTS

- **Dr. P. Vinothiyalakshmi, Assoc. Prof. / CSE,** Attended one day FDP on "Faculty Sensitisation Programme" organized by Standards Club-SVCE, Sri Venkateswara College of Engineeringon 10/1/2024.

- **Dr. P. Vinothiyalakshmi, Assoc. Prof. / CSE,** Attended one day seminar on "Anticipating and Proactively Resolving Emerging Cyber Security Challenges", organized by CSE, Sri Venkateswara College of Engineering on 09-01-2024.

36

FACULTY ACHIEVEMENTS

- **Dr. S. Rajalakshmi, Assoc. Prof. / CSE,** attended a 3 days Workshop on Emerging Data Engineering Technologies organized by the Department of Computer Science & Engineering, Sri Venkateswara College of Engineering, Sriperumbudur-602 117 from 29-01-2024 to 31-01-2024.

- **Dr P Geetha, AP / CSE,** attended 5 days FDP on **"Microsoft Power BI Data Analyst Associate"** organized by Hindustan Institute of Technology and Science associated with ICT Academy Chennai, from 08.01.2024 to 12.01.2024.

- **Ms. R K Kapila Vani, AP / CSE,** attended 5 days FDP on **"Microsoft Power BI Data Analyst Associate"** organized by Hindustan Institute of Technology and Science associated with ICT Academy Chennai, from 08.01.2024 to 12.01.2024.

37

FACULTY ACHIEVEMENTS

- **Ms. R. Poorni, AP / CSE,** Participated in DRDO sponsored one day National Level Seminar on "Anticipating and Proactively Resolving Emerging Cyber Security Challenges" organized by the Department of Computer Science and Engineering, SVCE, on 09.01.2024.

- **Ms. R. Poorni, AP / CSE,** Participated "Faculty Sensitisation Programme", Organised by the Standards Club – SVCE in association with BUREAU OF INDIAN STANDARDS on 10th January 2024.

- **Ms. Ajoe Sweetlin Jeena A, AP / CSE,** has participated "Faculty Sensitisation Programme", Organised by the Standards Club – SVCE in association with BUREAU OF INDIAN STANDARDS on 10th January 2024.

38

FACULTY ACHIEVEMENTS

- **Ms. M. Shanthalakshmi, AP / CSE,** attended a 1 day National Seminar funded by the Defence Research and Development Organisation (DRDO) entitled "Anticipating and Proactively Resolving Emerging Cyber Security Challenges" organized by Dept of CSE, SVCE, Chennai on 9-01-2024.

- **Ms. M. Shanthalakshmi, AP / CSE,** attended a 1 day training program entitled "BIS Sensitization Programme for Faculty (BSPF)" organized by Standards Club SVCE in collaboration with the Bureau of Indian Standards (BIS), Chennai branch on 10/01/2024.

39

FACULTY ACHIEVEMENTS

- **Ms. M. Shanthalakshmi, AP / CSE,** attended a 3 days workshop on **"Emerging Data Engineering Technologies"** organized by Dept of CSE, SVCE, Chennai during the period 29-01-2024 to 31-01-2024.

- **Ms. M. Shanthalakshmi, AP / CSE,** acted as a reviewer in a Optical and Quantum Electronics, Springer Nature.

40

RESEARCH ACTIVITIES

JANUARY 2024

DEPARTMENT OF COMPUTER SCIENCE

36

Research Supervisors

Dr. R. Anitha, Prof. & HOD - CSE

Area of Interest: Cloud Computing, Data Mining, Large Scale Database, Data Structures and Algorithms & Big Data Analytics.

Dr. J. M. Gnanasekar, Prof - CSE

Area of Interest: Web Technology, Cloud Computing, Service Oriented Computing.

Dr. N. M. Balamurugan, Prof - CSE

Area of Interest: Artificial Intelligence, Machine Learning, Intelligent Networks,Internet–of–Things.

42

Research Supervisors

Dr. N. Rajganesh, Associate Professor - CSE

Area of Interest: Artificial Intelligence, Machine Learning, Cloud Computing, SOA.

Dr. P. Vinothiyalakshmi, Associate Professor - CSE

Area of Interest: Cloud Computing, Internet of Things (IoT), Machine Learning, Data Structures, OOPS, Operating System, Computer Networks, Data Mining.

Dr. M. S. Girija, Assistant Professor - CSE

Area of Interest: Wireless Sensor Networks, Artificial Intelligence and Machine Learning, Data Science and Analytics, Natural Language Processing

43

PUBLICATIONS

- **Dr. R. Anitha, HOD / CSE** and **Mr. P. Selvamani, AP / CSE** has published a paper titled "**Edge-centric energy efficient LSTM with federated learning model based computation offloading for IoT applications**" in Journal of Physics: Scopus Indexed Conference Series. doi:10.1088/1742-6596/2646/1/012028 - January 2024

- **Dr. R. Anitha, HOD / CSE and MS. G. R. Khanaghavalle, AP / CSE**, paper titled **"Anomaly Detection in Pulmonary Acoustics through Neural Networks"** has been selected for the presentation at the upcoming International Conference on RESEARCH TRENDS IN AI AND IoT FOR INFRASTRUCTURE AND INDUSTRY - AIIII 2024 during 6th-8th March, 2024 - CFR, Anna University.

PUBLICATIONS

- **Dr. R. Anitha, HOD / CSE** and **E. Sivakumar**, Paper titled: **MACHINE TRANSLATION : A COMPREHENSIVE SURVEY KANITAMIL' 24** is selected for the presentation at the upcoming International KaniTamil24 Conference on 8.02.2024 - 09.02.2024 - Tamil Virtual Academy

- **Dr. V. Rajalakshmi, Assoc. Prof / CSE** published a patent titled **"Smart walker for managing body alignment"** in IPR journal on 12/01/2024.

- **Ms. S. Poorani and R. Anitha,** Privacy-Preserving Cloud Data Security: Integrating the Novel Opacus Encryption and Blockchain Key Management, KSII Transactions on Internet and Information Systems, vol. 17, no. 11, pp. 3182-3203, 2023. DOI: 10.3837/tiis.2023.11.015. **Impact Factor: 1.5.**

DEPARTMENT
OF
COMPUTER SCIENCE AND ENGINEERING

CSE BYTES
EDITORIAL TEAM

Dr. N. RAJGANESH, ASSOC. PROF. / CSE
Dr. S. D. NANDAKUMAR, AP / CSE
Ms. R. POORNI, AP / CSE

SRI VENKATESWARA COLLEGE OF
ENGINEERING
(AUTONOMOUS)
P.B NO: 1, PENNALUR, SRIPERUMBUDUR –
602 117

DEPARTMENT
OF
COMPUTER SCIENCE AND ENGINEERING

CSE BYTES
EDITORIAL TEAM

Ms. D. SHALINI, III / CSE
Ms. R. SWATHI, III / CSE
Ms. J. SRINITHI GANESH, III / CSE
Ms. V. SANGEETHA, III / CSE
Ms. S. VARNIKA VARSHINI, II / CSE
Ms. T. SHRUTHI, II / CSE

SRI VENKATESWARA COLLEGE OF
ENGINEERING
(AUTONOMOUS)
P.B NO: 1, PENNALUR, SRIPERUMBUDUR –
602 117

47

CSE-BYTES

Sri Venkateswara College of Engineering
Pennalur Village, Chennai - Bengaluru High Road, Sriperumbudur Tk. - 602 117,
Kancheepuram Dist. Tamil Nadu, India
+91-44-27152000