



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)

School of Computing

Department of Information Technology

Newsletter



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 No.42, Avadi-Vel Tech Road,
Vel Nagar, Avadi,
Chennai-600 062.

 1800 212 7669

 www.veltech.edu.in

Vision and Mission

VISION



To evolve as a center of academic excellence in providing globally standard education and research in the field of Information Technology and to mould young graduates into competitive, innovative, self-disciplined and visionary computer professionals while maintaining a commitment to diversity and humanity.

MISSION



- M1:** To design and update an outcome-based curriculum that equips students with modern computing knowledge to solve real-world problems.
- M2:** To strengthen conceptual understanding and analytical capability through innovative, ICT-enabled and learner-centered pedagogical practices.
- M3:** To build a vibrant research environment that enables faculty and students to advance innovation in computing.
- M4:** To nurture ethical, complete and industry ready professionals capable of pursuing diverse career paths and contributing responsibly to society.



Programme Educational Objectives (PEOs)

After 3-5 years from the year of graduation, our graduates will,

- PEO1: Formulate and apply mathematical, scientific, and engineering principles to solve problems in the information technology domain.
- PEO2: Leverage modern IT technologies to address societal expectations and fulfill professional responsibilities.
- PEO3: Showcase problem-solving ability along with strong communication, teamwork, leadership, and ethical values to work effectively in the Information Technology domain.
- PEO4: Pursue higher studies at reputed institutions globally, build careers in IT core companies and commit to lifelong learning.

Program Outcomes (POs)

- PO1: **Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO2: **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.
- PO3: **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.
- PO4: **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.

- PO5: **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.
- PO6: **The Engineer and The 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.
- PO7: **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.
- PO8: **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9: **Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10: **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO11: **Project Management and Finance:** Demonstrate knowledge and understanding of the engineering and 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.
- PO12: **Life-Long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Programme Specific Outcomes (PSOs)

- PSO1: Acquire the basic knowledge of algorithms and recent tools for developing real-time software solutions related to the IT industry.
- PSO2: Apply suitable methodologies and use innovative ideas to solve real-world complex problems in society.
- PSO3: Be a competitive employee in the industry or an IT entrepreneur to face local and global challenges.

Department Highlights

The Department of Information Technology (IT), established in 1997, has evolved into a dynamic academic and research community with a student strength of 190. The Department is equipped with state-of-the-art laboratories and is supported by a highly qualified and dedicated faculty team of 15 members. Students actively participate in professional bodies such as CSI, IEEE, enhancing their technical and professional competencies. The Department regularly organizes technical events, workshops, seminars, hackathons, and coding competitions, and its students consistently demonstrate excellence through notable academic and extracurricular achievements at regional.



INSTITUTION LEADERSHIPS



Col. Prof. Dr. K. Rangarajan
B.E. (Elec), B.E. (Mech), M.S. (Auto), D.Sc.,
Founder President & Chancellor



Dr. Sagunthala Rangarajan
MBBS
Foundress President



Mrs. Rangarajan Mahalakshmi Kishore
B.Tech, M.Tech, MBA(UK),
Chairperson & Managing Trustee



Prof. S. Salivahanan
Vice Chancellor

Department Leaderships



Dr. V Srinivasa Rao
Dean - School of Computing



Dr. C Mahesh
HoD - Information Technology

Semester Overview

The first semester of the Academic Year 2022–2023 highlighted the Department of Information Technology's strong focus on research, innovation, industry-oriented learning, student achievements and academic outreach. The semester was marked by the department's flagship international conference ICRTITA'22, along with research paper presentations, coding competitions, guest lectures, faculty resource-person engagements, hackathon mentoring and technical achievements.

Smart India Hackathon 2022 – Student Mentoring

25 August 2022

Mrs. D. Ramya guided students in identifying and submitting a suitable problem statement for Smart India Hackathon 2022, an innovation initiative under the Ministry of Education, Government of India. Her mentoring supported the students in understanding the problem requirements, refining their proposed ideas and preparing the submission for the national-level innovation challenge.

CODEATHON – August 2022: Second Prize

August 2022

Mr. Prashant Kumar Singh secured Second Prize in the CODEATHON – August 2022 Edition, organized by the Office of Campus to Corporate, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology. His achievement reflected strong programming, logical thinking and problem-solving skills in a competitive coding environment.



ICRTITA'22 – International Conference on Recent Trends in Information Technology and its Application

29–30 August 2022

The Department of Information Technology, School of Computing, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology organized the International Conference on Recent Trends in Information Technology and its Application (ICRTITA'22) on 29 and 30 August 2022.

The conference brought together academicians, researchers, industry professionals and students to exchange knowledge and present research in emerging areas of Information Technology. The technical themes covered Artificial Intelligence, Deep Learning, Data Science, Cloud Computing, Computer Vision, Internet of Things, Blockchain, Cyber Security, Robotics, Quantum Computing, Augmented and Virtual Reality, Wireless Communication and other contemporary areas. Outstanding research contributions were recognized through Best Paper Awards in the technical sessions.



Research Contributions and Recognition at ICRTITA'22

29–30 August 2022



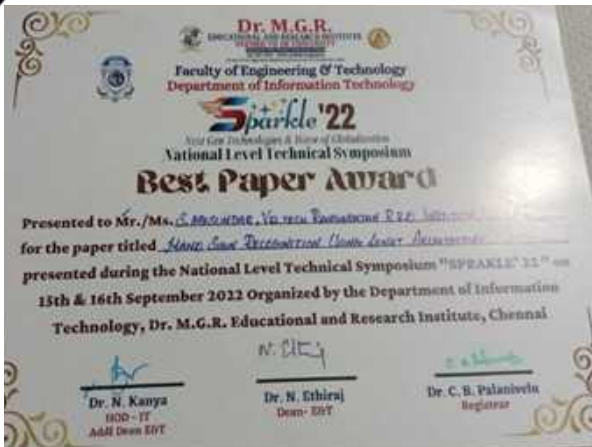
ICRTITA'22 provided an opportunity for students and faculty members to showcase their research and contribute to scholarly discussions. V. R. Saravana Perum-al presented the paper titled “Regional Stores Products Recommender Using Attention-Based Long-Term Short-Term Memory.”

Mr. Prashant Kumar Singh received the Best Paper Award for the paper titled “Real Time Face Mask Detection Using MobileNetV2 Algorithm.” The achievement demonstrated his interest in applying Deep Learning and Computer Vision techniques to practical applications. Faculty members from the Department of Information Technology along with external academicians and subject experts, contributed to the technical review process of the conference. Their collective involvement in evaluating research submissions strengthened the quality of the technical sessions and reflected the department’s active engagement in scholarly review, research dissemination and academic collaboration.

Best Paper Award – SPARKLE'22 National Level Technical Symposium

15–16 September 2022

Mr. Abisundar received the Best Paper Award at SPARKLE'22 – National Level Technical Symposium, organized by the Department of Information Technology,



Faculty of Engineering & Technology, Dr. M.G.R. Educational and Research Institute, Chennai, on 15 and 16 September 2022. He presented the paper titled “Hand Sign Recognition Using LeNet Architecture.” The recognition highlighted the student’s interest in Deep Learning and its application in developing intelligent hand-sign recognition systems.

Resource Person Session – Role of Machine Learning in Medical Image Processing

06 October 2022

Dr. D. Sugumaran delivered a webinar on “Role of Machine Learning in Medical Image Processing”, organized by the Department of Information Technology, Kings Engineering College, Irungattukottai, Sriperumbudur, Chennai, on 06 October 2022. The session focused on applications of Machine Learning techniques in medical image analysis and highlighted the growing role of Artificial Intelligence in supporting healthcare-related technologies.

Faculty Resource Person – Machine Learning and Deep Learning

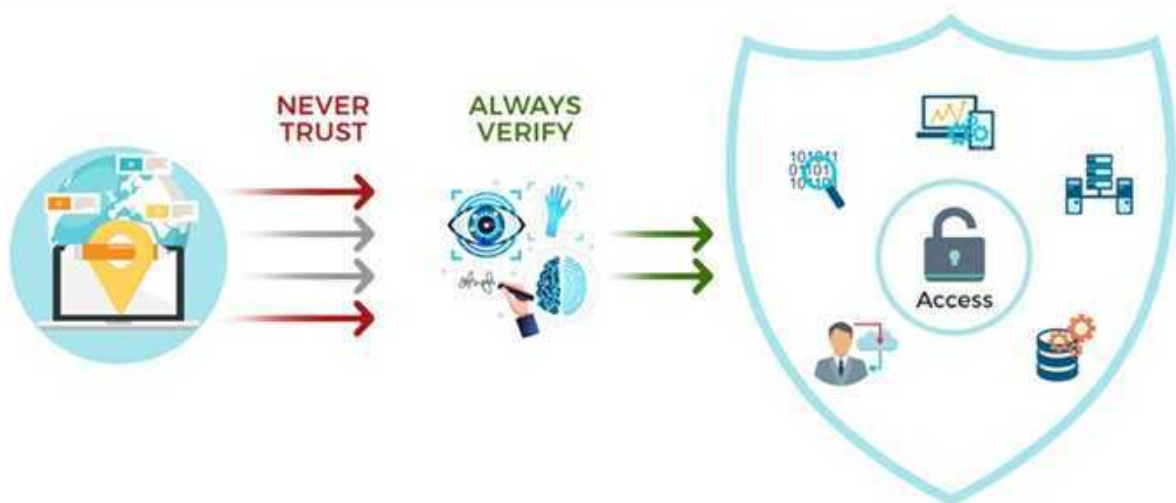
11–15 October 2022

Dr. C. Mahesh contributed as a Resource Person for a programme on “Machine Learning and Deep Learning” organized by SRM Institute of Science and Technology, Chennai, from 11 to 15 October 2022. The academic engagement facilitated knowledge sharing in contemporary areas of Artificial Intelligence, Machine Learning and Deep Learning and strengthened the department’s external academic outreach.



Zero-Trust Cybersecurity - Student Contributions

Zero-Trust Cybersecurity is a modern security approach based on the principle of “never trust, always verify.” Instead of automatically trusting users or devices simply because they are inside an organization’s network, Zero Trust requires continuous verification before granting access to applications, systems and data. This approach is becoming increasingly important as organizations adopt cloud services, remote work, mobile devices, IoT and distributed digital infrastructure.



Applications

Zero Trust can be applied across cloud computing, enterprise networks, remote work environments, healthcare, financial services, education, industrial IoT and critical infrastructure. In an industrial environment, for example, Zero Trust principles can help control access between employees, machines, applications and operational technology systems rather than allowing unrestricted communication across the network.

One Day Guest Lecture on Data Analytics

04 November 2022

The Department of Information Technology organized a One Day Guest Lecture on “Data Analytics” for B.Tech. Information Technology students on 04 November 2022.

The session was delivered by Dr. E. Sivasankar, Associate Professor, National Institute of Technology Tiruchirappalli. Students were introduced to the fundamentals of Artificial Intelligence, Machine Learning and Data Analytics. The session covered concepts and algorithms including K-means, K-medoids and DBSCAN, along with supervised and unsupervised learning approaches.

Real-world examples and case studies helped students understand the practical relevance of Data Analytics. The session also provided useful guidance on career opportunities in Data Science and Analytics.



Resource Person – Multidisciplinary Research

04 November 2022

Dr. J. Visumathi delivered a session on “Multidisciplinary Research” at PACE Institute of Technology and Sciences, Andhra Pradesh, on 04 November 2022. The session highlighted the importance of integrating knowledge from different disciplines and encouraged participants to explore collaborative research opportunities across diverse fields.

The academic interaction reflected the department’s continued emphasis on research collaboration and knowledge sharing beyond the institution.

Intelligent Innovators Hackathon – Academic and Innovation Engagement

04–05 November 2022

Mr. R. Pushpakumar participated in the Intelligent Innovators Hackathon conducted at Sri Eshwar College of Engineering on 04 and 05 November 2022. The activity provided exposure to innovation-driven problem solving and hackathon-based learning and encouraged the development of creative and solution-oriented approaches to engineering challenges.

Guest Lecture – Machine Learning and its Applications

17 December 2022

Dr. S. Jagadeesh delivered a guest lecture on “Machine Learning and its Applications” at the University College of Engineering, Panruti, on 17 December 2022.

The session introduced students to fundamental Machine Learning concepts, practical applications and real-world examples. The interactive lecture enabled learners to understand how Machine Learning techniques can be used to address problems across different application domains.



Summer Semester Closing Note

The summer semester of 2022–2023 witnessed active participation by the Department of Information Technology in research, innovation, coding competitions, international conference activities, student paper presentations, academic mentoring, guest lectures and faculty outreach programmes. The successful organization of ICRTITA'22, student achievements in research and coding, and faculty contributions as resource persons and academic mentors strengthened the department's culture of continuous learning, innovation and collaborative engagement.



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