

TEKNEWS

NEWSLETTER

FROM THE HEAD OF DEPARTMENT



I am delighted to present the TEKNEWS for the Department of Computer Science and Engineering, Academic Year 2024-2025, This yearly publication celebrates the continued excellence, innovation, and achievements of our faculty and students during this transformative period.

The year has witnessed significant milestones including groundbreaking workshops on emerging technologies, strategic partnerships with leading research institutions, accelerated patent filings, and exceptional student achievements. Our commitment to fostering research excellence, industry collaboration, and holistic student development continues to drive our departmental vision.

VISSION AND MISSION

VISION

The vision of the Computer Science and Engineering department is to develop in to a globally visible knowledge community, imparting technical training and research advancements with high technical competency and moral values.

MISSION

The Mission of Computer Science and Engineering department is to produce Quality Engineers, Entrepreneurs, Researchers and Technical consultants capable of demonstrating unbounded programming skills, domain knowledge and excellent moral values for the advancement of sustainable societal needs.

Newsletter Highlights

From the Head of Department

Faculty Corner

Student Highlights

Placements & Internships

Acknowledgments

FACULTY CORNER**ONLINE COURSES & CERTIFICATIONS**

Our faculty members have consistently engaged in continuous professional development through various online platforms:

1. NPTEL & NITTT Courses**Dr. R. Nagendran**

- Successfully completed 8-week course on "Accreditation and Outcome Based Learning" (October 2024)
- Successfully completed 12-week course on "Introduction to Internet of Things" (October 2024)

Dr. N.S. Kavitha

- Successfully completed 8-week course on "Accreditation and Outcome Based Learning" (October 2024)
- Successfully completed 12-week course on "Introduction to Software Engineering" (October 2024)

Dr. Jim Mathew Phillip

- Successfully completed 8-week course on "Accreditation and Outcome Based Learning" (October 2024)

Dr. R. Kumar

- Successfully completed 8-week course on "Accreditation and Outcome Based Learning" (October 2024)
- Successfully completed "Alibaba Cloud Certification" conducted by Alibaba Cloud Academy (2024)

Dr. R.N. Devendra Kumar

- Successfully completed 8-week course on "Accreditation and Outcome Based Learning" (October 2024)

Dr. S. Rajesh

- Successfully completed "Alibaba Cloud Certification" conducted by Alibaba Cloud Academy (2024)
- Successfully completed 8-week course on "Google Cloud Computing Foundations" (October 2024)
- Successfully completed 12-week course on "Soft Skills" (October 2024)

Ms. R. Abinaya

- Successfully completed 8-week course on "Accreditation and Outcome Based Learning" (October 2024)
- Successfully completed 12-week course on "Software Testing" (October 2024)
- Successfully completed Infosys Springboard certification on "Building Levels of VR" (August 2024)

3. Data Science & ML Courses**Ms. N. Sanjana**

- Successfully completed Infosys certificate course on "Explore Machine Learning using Python" (July 2024)
- Successfully completed Infosys certificate course on "Natural Language Processing for Developers" (July 2024)
- Successfully completed Infosys certificate course on "Python for Data Science" (July 2024)
- Successfully completed 4-week course on "Design Thinking - A Primer"

2. Cloud & AI Certifications**Ms. S. Revathi**

- Successfully completed "Alibaba Cloud Certification" conducted by Alibaba Cloud Academy (2024)
- Successfully completed Module 5: "Technology Enabled Learning and Life Long Self Learning of NITTT" (September 2024)
- Successfully completed Module 6: "Student Assessment and Evaluation of NITTT" (September 2024)
- Successfully completed Certificate of Competency from NVIDIA for "Fundamentals of Deep Learning" (November 6, 2024)
- Successfully completed 8-week course on "Google Cloud Computing Foundations" (October 2024)
- Successfully completed 12-week course on "Soft Skills" (October 2024)

Ms. K. Saranya

- Successfully completed 8-week course on "Google Cloud Computing Foundations" (October 2024)
- Completed online certificate course on "Fundamentals of Deep Learning" by NVIDIA
- Completed online certificate course on "MERNSTACK Technology" by Microsoft

Ms. K.K. Archana

- Successfully completed 8-week course on "Google Cloud Computing Foundations" (October 2024)

Ms. V. Preetha

- Successfully completed Module 1: "Orientation towards Technical Education and Curriculum Aspects" of National Initiative for Technical Teachers Training (September 2024)
- Successfully completed Module 2: "Professional Ethics and Sustainability" of National Initiative for Technical Teachers Training (September 2024)

Ms. K. Karpagavalli

- Successfully completed Coursera course on "Blockchain Scalability and its Foundations in Distributed Systems"

FACULTY CORNER**4. Advanced AI & Deep Learning Certifications****Dr. N.S. Kavitha**

- Successfully completed Infosys Springboard certification on "Introduction to Artificial Intelligence" (February 2025)
- Successfully completed Infosys Springboard certification on "Introduction to Deep Learning" (February 2025)

Dr. M. Kalpana Devi

- Successfully completed Infosys Springboard certification on "Introduction to Artificial Intelligence" (February 2025)
- Successfully completed Infosys Springboard certification on "TechA Testing Fundamentals" (February 2025)

Ms. R. Abinaya

- Successfully completed Infosys Springboard certification on "Artificial Intelligence" (March 2025)
- Successfully completed Great Learning certification on "UI/UX for Beginners" (March 2025)
- Successfully cleared TalentNext certification assessment and recognized as Mentor for Project-based Learning in Java Full Stack (March 2025)

Ms. V. Preetha

- Successfully cleared TalentNext certification assessment and recognized as Mentor for Project-based Learning in Java Full Stack

Ms. K.K. Archana

- Successfully completed Great Learning Certification on "How to Build Your Own ChatBot Using Python"
- Successfully completed Great Learning Certificate on "Introduction to Graphic Design with Photoshop"

5. Specialized Technical Certifications**Ms. N. Sanjana**

- Successfully completed 4-week NPTEL certification on "Design Thinking"

Ms. A. Jayasmruthi

- Successfully completed 4-week NPTEL certification on "Design Thinking" (August 2025)

Ms. S. Sanjana

- Successfully completed 4-week NPTEL certification on "Design Thinking" (August 2025)

Ms. Shenbagapriya

- Successfully completed 4-week NPTEL certification on "Design Thinking" (August 2025)

FACULTY DEVELOPMENT PROGRAMMES**Ms. S. Revathi**

- Attended AICTE Training and Learning (ATAL) Academy FDP on "Exploring AI Using IBM Watson And Google Colab" at Gurukula Kangri Vishwavidyalaya, Haridwar, Park College of Engineering and Technology
- Attended 6-day FDP on "Exploratory Data Analysis and Visualization" organized by Electronics and ICT Academy, IIT Roorkee (September 9-14, 2024)

Ms. R. Abinaya

- Successfully participated and completed AICTE Training and Learning (ATAL) Academy FDP on "Advanced Recurrent Neural Network (RNN) for Sequential Data" at Park College of Engineering and Technology (February 17-22, 2025)

Dr. R.N. Devendra Kumar, Ms. S. Revathi, Ms. A. Jayasmruthi

- Successfully completed Faculty Enablement Program on "Artificial Intelligence Primer Certification" conducted by Infosys Springboard (February 17-21, 2025)

Dr. M. Kalpana Devi

- Attended 6-day FDP on "Deep Learning and IoT Driven Smart Applications" (February 2025)
- Five Days Online Faculty Development Programme on "Cloud Computing and AI Integration" at Sathyabama Institute of Science and Technology (February 10-14, 2025)
- Attended 6-day ATAL FDP on "Smart Communication in IoT: Security, Future Applications and Possibilities" (June 2024)

Ms. N. Sanjana

- Attended 40-hour (3-Credits equivalent) Faculty Development Programme on "Quantum Technologies & Applications" jointly organized by Electronics & ICT Academies - MNIT Jaipur, NIT Patna, IIT Roorkee, IIT Guwahati, IIITDM Jabalpur, and NIT Warangal (February 28 - March 22, 2025)
- Attended Faculty Development Program on "Innovation and Entrepreneurship" organized by MIC Innovation Cell at PSG College of Technology (March 24-28, 2025).
- Attended One-Week Online Faculty Development Programme on "Machine Learning and Statistical Data Analysis using MATLAB" organized by UGC-MMTTC, Shri Mata Vaishno Devi University, Katra, J&K (July 8-13, 2024)

Ms. K.K. Archana

- Successfully completed Two-week FDP on "Computer Vision and GenAI Tools" conducted remotely by Ramco Institute of Technology, Rajapalayam

Ms. K. Karpagavalli

- Successfully completed FDP on "Introduction to Computers Training" conducted remotely by IIT Bombay (December 2024)

JOURNAL PUBLICATIONS**M. Suresh Kumar**

Advanced Hybrid Optimization Algorithms for Energy Efficient Cloud Resource Allocation

Radio Science: Volume 59, Issue 11

First published: 30 October 2024

<https://doi.org/10.1029/2024RS008012>

Dr. R. Nagendran

"Lossless hyperspectral image compression by combining the spectral decorrelation techniques with transform coding methods"

Journal: International Journal of Remote Sensing

Pages: 6226-6248

Published Online: August 26, 2024

DOI: <https://doi.org/10.1080/01431161.2024.2388861>

Dr. R.M.S. Parvathi (2 Publications)

"Optimizing Task Off-Loading in Fog Cloud Computing Environments for Collaborative Unmanned Aerial Vehicles"

Co-author: S. Dinesh Kumar

Journal: Journal of Xidian University

Volume: 18, Issue: 7, Pages: 7-20

Published: July 2024

Indexing: UGC Care Group 2 Listed

"CBIR - Content Based Image Retrieval using Colour, Texture and Shape Features"

Co-author: Kommu Naveen

Journal: International Journal of Creative Research Thoughts (IJCRT)

Volume: 12, Issue: 11

Published: November 2024

Indexing: UGC Group 2 Listed

Ms. S. Revathi

"Machine Learning-Based Lifespan Prediction Modelling for Electric Submersible Pumps in Oil Wells"

Conference: 2024 Second International Conference on Computational and Characterization Techniques in Engineering & Sciences (IC3TES)

Location: Lucknow, India

Year: 2024

Pages: 1-5

DOI: 10.1109/IC3TES62412.2024.10877544

Ms. N. Sanjana (1 Publication)

"Rice Leaf Disease Detection using Fusion Optimization"

Co-authors: Immanuel R., Kirthika K. M., Sangeetha S., Maharaja K.

Conference: 2024 2nd International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS)

Pages: 697-702

Publisher: IEEE

Published: October 2024

Books & Book Chapters Published (July-December 2024)**Dr. R.M.S. Parvathi & Naveen Kommu**

Book Chapter: "Futuristic Trends in Information Technology"

E-Book Volume 3, 2024

Publisher: IIP Book Series

Dr. N.S. Kavitha & Dr. Jim Mathew Philip (2 Publications)

"Improved Zone Routing Protocol using Social Spider Optimisation for Load Balancing and Routing in MANET"

Co-authors: N. M. Saravana Kumar, D. Surendran

Journal: Journal of Environmental Protection and Ecology

Volume: 25, No: 7

"Load Balancing and Optimal Route Selection using Satin Bower Bird and Dolphin Glowworm Optimisation for Routing in MANET"

Co-authors: N. M. Saravana Kumar, D. Surendran

Journal: Journal of Environmental Protection and Ecology

Volume: 25, No: 7

Ms. N. Sanjana (2 Publications)

"Comparative Analysis of Convolutional Neural Network Models for Early Detection of Corn Leaf Diseases: Inception vs. MobileNet"

Co-authors: Immanuel R., Sheela Sobana Rani K.

Conference: 2024 International Conference on Emerging Research in Computational Science (ICERCS)

Pages: 1-8

Publisher: IEEE

"Performance Enhancement of Solar Still Desalination Using Sound Agitation and Condensation: A Comparative Study"

Co-authors: Immanuel R., Kannan K., Kirthika K. M.

Journal: Desalination and Water Treatment

Volume: 321, 100923

Book Chapter: "BIAS-based Deep Learning (DL) Models"

Book Title: Bio-inspired Algorithms in Machine Learning and Deep Learning for Disease Detection

Pages: 23-47

Publisher: CRC Press

Dr. M. Kalpana Devi (1 Publication)

"Optimizing Spectrum Handoff and Resource Utilization in Cognitive Radio Networks using Artificial Neural Networks"

Journal: ICTACT Journal on Microelectronics

Volume: 10, No: 4

Indexing: UGC Listed

Books & Book Chapters

Dr. M. Kalpana Devi (2 Books)

"Introduction to Operating Systems"

Co-author: Ms. M. Anitha

Publisher: Charulatha Publications

ISBN: 978-93-6260-783-6

"Data Structures"

Co-authors: Mr. T. Tholhappiya, Ms. B. Pavithra

Publisher: Charulatha Publications

ISBN: 978-93-6260-073-8

RESEARCH FUNDS & PROJECT GRANTS**External Funding****Dr. R.M.S. Parvathi (Faculty Guide)****Student Team:** Eric, Arun Daniel, Aswanth**Project Title:** "IOT based Smart Mirror using Raspberry PI"**Funding Source:** TNSCST Students Project Scheme**Amount Sanctioned:** Rs. 7,500**SRIT Research Project Scheme (RPS)****Dr. R. Kumar****Project Title:** "Programme and Course Outcomes Attainment: Educational Assessment Enhancement"**Amount Sanctioned:** Rs. 1,20,000**Sanctioned Date:** January 2025**Ms. N. Sanjana****Project Title:** "Explore, Engage, Excel: The SRIT XR Experience"**Amount Sanctioned:** Rs. 1,50,000**Sanctioned Date:** January 2025**Dr. M. Kalpana Devi (Faculty Mentor)****Student Team:** Alice Christina, R.S. Bhavya, J. Adhi Keerthana, V. Harshavardhini**Project Title:** "Food Spoiler Alert Using VOC Sensors"**Amount Sanctioned:** Rs. 20,000**Sanctioned Date:** January 2025**Ms. S. Revathi (Faculty Mentor)****Student Team:** S. Ashwin, M. Deepak, S. Dhamodaran, R. Elavarasan**Project Title:** "Development of Piezoelectric Flooring for Sustainable Electrical Energy Harvesting from Mechanical Stress"**Amount Sanctioned:** Rs. 15,000**Sanctioned Date:** January 2025**Ms. V. Preetha (Faculty Mentor)****Student Team:** S.K. Sulakshana Devi, R. Tharshana, Sharli Iris John Basker, M. Saleema Eunice**Project Title:** "Development of Piezoelectric Flooring for Sustainable Electrical Energy Harvesting from Mechanical Stress"**Amount Sanctioned:** Rs. 20,000**Sanctioned Date:** January 2025**Naan Mudhalvan - Niral Thiruvizha 2.0****Dr. R. Kumar****Project Title:** "How might we create a centralized dashboard for district administration to monitor and track the real-time progress of work across all departments, ensuring efficient management and decision-making?"**Status:** Shortlisted**Dr. M. Kalpana Devi****Project Title:** "Design a system to effectively monitor and provide real-time data on all aspects of patient care within a government hospital, encompassing both inpatients and outpatients"**Status:** Shortlisted**Ms. N. Sanjana****Project Title:** "Regional Language OCR Software for Text Conversion"**Status:** Shortlisted**PATENTS PUBLISHED****Dr. R.M.S. Parvathi (3 Patents)**

1. "An IoT-Enabled Deep Learning Model for Real-Time Driver Drowsiness Detection and Intervention Systems"
2. "System for High-Resolution Image Reconstruction from Low Resolution Inputs using Machine Learning"
3. "AI-Enhanced Smart Mirror With IOT Connectivity And Real-Time Display"

Ms. S. Revathi (1 Patent)**"Genetically Modified Plants with Enhanced Growth and Yield Characteristics"****Co-authors:** Ms. V. Preetha, Ms. K. Archana, Ms. A. Jayasmruthi**Ms. N. Sanjana (2 Design Patents)**

1. "WASHROOM CLEANING ROBOT" (Design Patent)
2. "FLOATING SOLAR STILL" (Design Patent)

MEMORANDUM OF UNDERSTANDING (MOUS) SIGNED**1. MoU with XTIC - IIT Madras****Faculty Coordinators:** Ms. R. Abinaya, Ms. K.K. Archana, Ms. V. Preetha**2. MoU with ALLREAL (AR/VR) - Extended from Previous Period****Faculty Coordinators:** Ms. R. Abinaya, Ms. K.K. Archana, Ms. V. Preetha

DEPARTMENT ACTIVITIES



“Dont study ML Learn ML”,



“How Cloud Technology Powers the Future of Income Generation”



“How to Land Your Dream Job in a Challenging Job Market”



“Prototyping your way into Web Design and Development”



“Tekace Association Inauguration”



“Aamzon Web Service (AWS) Workshop”

DEPARTMENT ACTIVITIES



“Alumni Mock Interview for Students”



“Innovation Unleashed: Chatbots and Virtual Assistants in the Start Up Revolution”



“Workshop on AI”



“Coding Contest”



“Code, Design, Immerse: 5 Days to Kickstart AR/VR Development”



“Campus to Career: Navigating the Software Industry with the Right Mindset”

STUDENT HIGHLIGHTS

ACADEMIC EXCELLENCE

First Rank Achievement

Ashwin R - First Rank with GPA 9.44 in semester

CERTIFICATIONS & ONLINE COURSES

Alan S

Alibaba, Coursera Python, NPTEL Python for Data Science,
Paper Presentation

Ashwini CS

Generative AI (GUVI), Python Zero to Hero

Dharshini VP

ChatGPT & Python (GUVI)

Gayatheri I

SAWIT. AI Learnathon

Priyanka G

NPTEL Introduction to Internet of Things (Elite Certificate)

Althaf Arafath

NPTEL: Introduction to Machine Learning

HackerRank: CSS (Basic)

HackerRank: Java (Basic)

Jothimurugan

NPTEL: Programming in Java

HackerRank: Java (Basic)

Great Learning: Excel for Beginners

Hariharan A

Great Learning: UI/UX for Beginners

NVIDIA: Fundamentals of Deep Learning

Software Development & Cloud Computing

Dhamodaran

RTech Solutions: Full Stack Python Workshop

Dharshini.U

AWS: Introduction to AWS Cloud Game Development

Aruna

Guvi: Python Completion Certificate

NPTEL: Ethical Hacking

Multiple IBM SkillsBuild Certifications:

Build Your First Chatbot

Text to Speech using IBM Watson

Machine Learning with Python

Generative AI Achievement Certificate from Guvi

Code, Design, Immerse: AR/VR Development Bootcamp"

Organizer: ALLREAL

Dharshini P - Received Certificate of Completion

Dharshini.U - Received Certificate of Completion

Hariharan A - Received Certificate of Completion

IBM SKILLSBUILD CERTIFICATIONS

Multiple students successfully completed IBM SkillsBuild
courses including:

Build Your First Chatbot

Text to Speech using IBM Watson

Explore Text to Speech Technologies

Machine Learning with Python

Generative AI for Software Development

COMPETITIONS & AWARDS

Major Competition:

National Level Electric Bike Design Challenge (EBDC'24) - Season 4.0

Award: BEST TEAM PRESENTATION AWARD

Key Award Winners

- Sivaraman G, SIVAJITH S P, Sriram N, Vasanth Kumar K, SRI SUDHAN T, Aadhil, Alice Christina, Althaf Arafath, Aruna, Gayathri, Gokila, Hariharan R, Harsha Vardhini, Janani, Joshna

Other Competitions

- Texperia 2025 (IPL Auction) at SNS College of Technology:**
 - I Prize: Nithsh R, Loga Dharinish V
 - II Prize: Manoj Kumaran N, Lakshmanan M
- Data Quest at PSG Institute of Applied Research:**
 - III Place: Loga Dharinish V
- Paper Presentations:**
 - Alan S at Sri S Ramasamy Naidu Memorial College
 - Jashwanth & Ashwin R: II Place in Web Designing (PPG College)



STUDENT HIGHLIGHTS**Vignesh V (III CSE C) - Multiple Awards**

India in 2047 -- Business Plan Challenge 2024"

Achievement: 2nd Place

"Paper Presentation Competition"

Venue: Christ the King Engineering College

Achievement: 1st Place

"Circuit Debugging Competition"

Venue: Christ The King Engineering College

Achievement: 2nd Place

"Technical Quiz Competition"

Venue: Christ The King Engineering College

Achievement: 3rd Place

"Technical Talk Competition"

Venue: Sree Sakthi Engineering College

Achievement: 1st Place

Tamil Nadu Karting Championship (TNKC) Season 2**Siddharth A**

Achievements:

Best Skip Pad Award

Best Build Quality Award

Best Time Optimization Award

Excellence Awards - Cultural Competitions

Hariharan A

Excellence Award: Second Place in Elocution (English)

Excellence Award: Third Place in Essay Writing
(English)

SPORTS ACHIEVEMENTS**Arun Prakash**

Anna University Table Tennis - Second Position

Elakkiya

Throw Ball - Second Place

Others

Various CSE Students won awards in Cricket, Football, Ball-Badminton, Athletics, etc.

RESEARCH & PUBLICATIONS**Aswin Bharath**

Published "Multi-Criteria Decision Making in Uncertain
Environments: A Neutrosophic Fuzzy Approach"

Dhanya Sri S

Best Paper Award for "Green Nano Technology"



PLACEMENTS & INTERSHIPS**FINAL YEAR PLACEMENT****89 Students Placed**

Top Companies: Edu-versity (28), Accenture (20), LTI Mindtree (7), Hexaware (6), Ethnus (8), Zoho (3)

Salary Range: 5 LPA to 10+ LPA

INTERSHIPS**40+ Students Successfully Completed Internships across domains:**

Web Development (15+ students)

AI & Machine Learning (8+ students)

Image Processing (3+ students)

Full Stack Development (5+ students)

Game Development, IoT, Digital Marketing, Data Science



ACKNOWLEDGMENTS

The Department of Computer Science and Engineering extends its gratitude to:

- Management of SRIT for continuous support and guidance
- Principal, SRIT for encouraging academic and research excellence
- Industry Partners for providing collaboration and mentorship opportunities
- Alumni for their contributions as resource persons
- Parents for their trust and cooperation
- Students for their active participation and achievements
- Faculty Members for their dedication and research contributions

DEPARTMENTAL INFORMATION

Department of Computer Science and Engineering

Sri Ramakrishna Institute of Technology

Pachapalayam, Coimbatore - 641 010

Tamil Nadu, India

EDITORIAL TEAM



Ms. K Saranya
Assistant Professor, CSE

"EMPOWERING MINDS, TRANSFORMING FUTURES"

Department of Computer Science and Engineering

Sri Ramakrishna Institute of Technology

DESIGNED BY

Diwakar S

Mugil K

Rahul K P