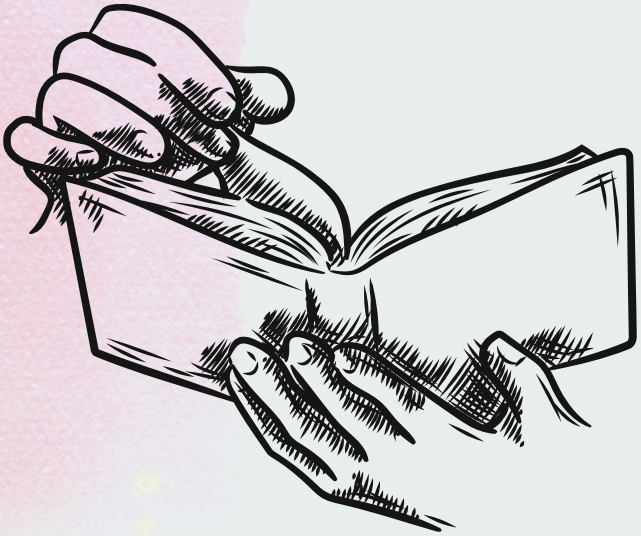
PESITM
Education for the real world

AVANTARA

A Journey of Knowledge, Innovation, and Lasting Impact.....!!



DEPARTMENT of Computer Science and Engineering (DATA SCIENCE)

DEPARTMENT VM PEO & PSO

Vision

To be a premier centre of excellence in Computer Science and Data Science education, research, and innovation, producing ethically strong and globally competent professionals who leverage data for societal and industrial advancement.

Mission

M1: To deliver quality education in Computer Science and Data Science through innovative teaching practices and dedicated academic mentorship.

M2: To equip students with analytical, computational, and problem-solving skills to address real-world challenges using data-driven technologies.

M3: To promote research, industry collaboration, ethical values, and lifelong learning to develop globally competent data science professionals.

Program Educational Objectives (PEO)

PEO1: To build strong foundations in Computer Science and Data Science, enabling graduates to excel in analytical, computational, and problem-solving roles.

PEO2: To encourage research, innovation, and industry engagement while fostering adaptability and lifelong learning in emerging technologies.

PEO3: To develop ethical, responsible, and globally competent professionals with leadership and teamwork skills.

Program Specific Outcomes (PSOs)

PSO1: Apply principles of Computer Science, Data Science, and Statistics to analyze and solve complex real-world problems using data-driven approaches.

PSO2: Design and develop intelligent systems and scalable applications using AI, Machine Learning, and modern computing technologies.

PSO3: Utilize appropriate tools and techniques for data analytics and system development while demonstrating professionalism, teamwork, and ethical responsibility.

DEAR COLLEAGUES AND STUDENTS,

I am delighted to present the Avantara 2026 edition of our departmental newsletter at PESITM, reflecting a year marked by growth, innovation, and academic excellence. Over the past year, our department has made significant strides through the dedication of our faculty, the enthusiasm of our students, and the strength of our collaborative ecosystem. This edition brings together key highlights of our academic initiatives, workshops, expert talks, hackathons, and student-driven activities that continue to shape a dynamic and progressive learning environment.

Our continued engagement with industry and research has provided students with meaningful opportunities to apply their knowledge in real world contexts, fostering creativity, critical thinking, and problem solving skills. We remain committed to delivering quality education while nurturing innovation and lifelong learning. As we move forward, we aim to build on these achievements and continue shaping future-ready professionals who can contribute effectively to the evolving data-driven world.

Best Regards,

DR. SUNITHA B S

Head of the Department

ABOUT FACULTY

DR.SUNITHA B S
HEAD OF DEPARTMENT
B.E, M TECH, PH.D

MR.NITHIN H V
ASSISTANT PROFESSOR
PH.D, M.TECH, B.E

MR.MARUTHI S T
ASSISTANT PROFESSOR
PH.D, M.TECH, B.E

FROM THE DESK OF THE DEPARTMENT

Our department is driven by a dedicated and experienced team of faculty members who are committed to excellence in teaching, research, and student mentorship. With diverse academic backgrounds and industry exposure, our faculty bring a blend of knowledge and practical insight into the learning environment, ensuring that students receive a well-rounded and application-oriented education.

The faculty actively engage in organizing workshops, expert sessions, and hands-on learning activities that encourage innovation, critical thinking, and continuous skill development. Their consistent efforts in guiding students through academic, technical, and co-curricular pursuits play a vital role in shaping confident and future-ready professionals.

Beyond academics, the faculty foster a supportive and collaborative atmosphere that motivates students to explore new ideas, participate in research initiatives, and excel in various domains. Their commitment and passion continue to strengthen the department's vision of nurturing talent and promoting holistic growth.

MS.SNEHA S
ASSISTANT PROFESSOR
B.E(CS&E), M.TECH. (CS&E)

KEERTHANA
ASSISTANT PROFESSOR
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MRS.PRIYANAK R
OFFICE ASSISTANT

EDITORIAL COMMITTEE

Greetings from the Editorial Team....!

We are pleased to present the 2026 edition of the Department of Computer Science and Engineering (Data Science) newsletter, highlighting the key academic, technical, and co-curricular activities carried out during the year 2025. This edition offers a concise overview of student achievements, workshops, expert sessions, outreach programs, and initiatives that reflect our commitment to learning and innovation. We have also showcased the contributions of students and faculty, promoting a culture of collaboration and growth. We extend our sincere gratitude to the management of PESITM, our respected Principal Dr. Swamy D R, the faculty coordinators, and student editors for their efforts in bringing out this publication.

Sincerely,
Ms. Sneha S
Assistant Professor

Ms.Sneha S
Editorial Chief

Jeevan K G
Editorial Team Head

M D Ayan
Member

Uday Reddy
Member

Chinmayi S M
Coordinator

Academic & Professional Engagements

1. EXPERT TALK ON DATA STRUCTURES

An insightful technical session titled “Cracking the Code: Preparing Data Structures for Job Interviews” was conducted on 23rd September 2025 at 1:30 PM for the third-semester students. The session was delivered by Ms. Suraksha S. Nayak, Software Engineer at SAP Labs, who shared valuable industry perspectives on the significance of data structures in technical interviews and real-world software development.

During the session, she elaborated on structured preparation strategies, systematic problem-solving approaches, and the expectations of leading technology companies from aspiring graduates. The interactive discussion encouraged analytical thinking and conceptual clarity among students. The program was successfully coordinated under the guidance of Dr. Sunitha B. S., ensuring a meaningful and professionally enriching learning experience.

2. CAMPUS CATALYST – INTERNAL HACKATHON 2025

Innovation and problem-solving form the foundation of technological advancement in today's rapidly evolving landscape. In alignment with this vision, Campus Catalyst 2025, the Internal Hackathon for Smart India Hackathon (SIH) 2025, was conducted on 15th September 2025 at the Main Seminar Hall. The initiative provided a dynamic platform for students to conceptualize and develop innovative, scalable solutions addressing real-world challenges in the spirit of Atmanirbhar Bharat.

The event was graced by Dr. Swamy D. R., Principal, and Dr. Sekar R., Vice Principal, whose presence underscored the institution's commitment to fostering innovation-driven learning. Coordinated by Dr. Sunitha B. S., SPOC for SIH 2025, along with faculty and student coordinators, the hackathon cultivated collaboration, critical thinking, and competitive preparedness. The initiative not only strengthened the regional innovation ecosystem but also empowered students to confidently progress toward national-level participation in SIH 2025.

3. ASTRA CLUB INAUGURATION

Fostering innovation and research-driven learning continues to be a cornerstone of academic excellence at PESITM in today's rapidly evolving technological landscape. In alignment with the institution's mission to nurture analytical thinking, innovation, and ethical professionalism, the ASTRA Club was inaugurated on 10th September 2025 at the Mechanical Seminar Hall, marking the launch of a dynamic, student-driven platform dedicated to creativity, collaboration, and technological advancement.

The ceremony was graced by Dr. Swamy D. R., Principal, and Dr. R. Sekar, Vice Principal, reflecting PESITM's strong commitment to empowering student-led initiatives and strengthening its academic ecosystem. Organized under academic leadership, the event witnessed enthusiastic participation from faculty and students alike. The establishment of the ASTRA Club marks a progressive step toward fostering research aptitude, interdisciplinary collaboration, and innovation-focused thinking within a vibrant student-driven community. Through structured technical activities and knowledge-sharing sessions, the club aims to provide practical exposure and leadership opportunities, serving as a catalyst for transforming ideas into impactful real-world solutions.

4. INDUSTRIAL VISIT TO IISC

As part of experiential learning and industry exposure, third-semester students undertook an academic visit to the Indian Institute of Science (IISc), Bengaluru, on 10th October 2025. The visit to the Supercomputer Education and Research Centre (SERC) provided a valuable opportunity to explore advanced research infrastructure and high-performance computing ecosystems within one of India's premier scientific institutions.

Accompanied by faculty members, the students gained comprehensive insights into cutting-edge supercomputing technologies, including India's advanced systems such as SahasraT and PARAM Pravega. The interaction enriched their understanding of large-scale data processing, computational modeling, and real-world applications of supercomputing in data science and interdisciplinary research. The visit significantly strengthened their academic perspective by bridging theoretical knowledge with contemporary technological advancements.

5. EXPERT TALK ON DIGITAL WELLNESS

In an era where digital engagement increasingly shapes everyday life, holistic well-being remains a fundamental pillar of personal and professional success. Emphasizing this perspective, an Expert Talk titled "Empower Your Oral Health: Achieving Wellness in a Digital World" was conducted on 5th November 2025. The session was delivered by Dr. Kala S. Bhushan, Professor, Department of Periodontics, Sharavathi Dental College, Shivamogga, who brought valuable medical insight into the intersection of health and technology-driven lifestyles.

The session highlighted the importance of maintaining oral hygiene as an integral component of overall wellness, particularly in today's fast-paced, technology-centric environment. Dr. Kala effectively connected oral health with mental clarity, digital balance, and sustainable daily habits, reinforcing the idea that true well-being begins with conscious lifestyle choices. Coordinated under academic guidance, the program witnessed active student participation and fostered greater awareness of the role of health consciousness in achieving a balanced and productive digital life.

6. DASSARA CELEBRATION

The auspicious occasion of Dassara was observed with devotion and cultural reverence, highlighting the significance of knowledge, skills, and the instruments that support academic and professional growth. As part of the Navaratri celebrations, Ayudha Puja was conducted in a serene and dignified manner, reflecting the institution's respect for learning and the values that guide intellectual development.

The celebration was marked by traditional decorations, floral arrangements, and vibrant rangoli, creating a spiritually uplifting atmosphere. Books, educational resources, and technical tools were placed for worship, symbolizing gratitude toward knowledge and the resources that enable progress. The observance fostered unity among students and faculty members, reinforcing cultural awareness and collective responsibility while upholding the importance of education and continuous learning.

7. TECHNICAL SESSION ON RAG

An insightful technical session on Retrieval-Augmented Generation (RAG) was conducted on 31st October 2025 in collaboration with Anvesana TBI and IIC PESITM. Delivered by Mr. Prithvi from Unriddle Technologies, the session explored the integration of knowledge retrieval systems with generative AI models, highlighting their growing significance in enhancing contextual intelligence and real-world AI applications. The program reflected the institution's continued commitment to fostering awareness of emerging technologies and strengthening technical competencies among students.

8. DATA VISUALIZATION EXHIBITION

The Data Visualization Exhibition served as a dynamic platform for students to present innovative projects that translated complex datasets into compelling visual narratives. The event showcased their analytical acumen, creativity, and technical proficiency in transforming raw data into meaningful insights. Through thoughtfully designed visual representations, students demonstrated the power of data storytelling as a critical tool for informed decision-making and contemporary problem-solving.

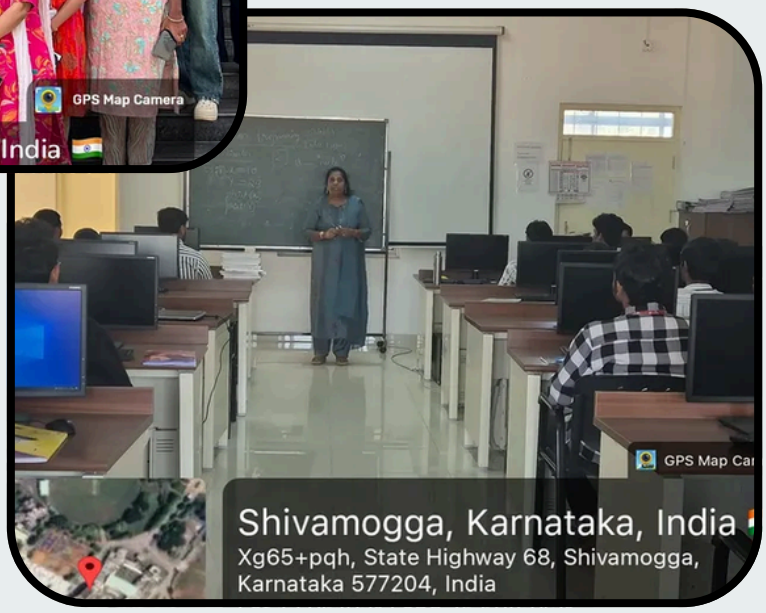
9. PYTHON DATA TOOLKIT WORKSHOP

On 8th January 2026, the Astra Club organized a session on “Python Data Toolkit” for first-semester students. The session introduced fundamental data science libraries such as Pandas, NumPy, Scikit-learn, and Seaborn. Students learned the basics of data manipulation, analysis, and visualization, along with an overview of simple machine learning workflows. The session provided a strong foundation for beginners to start their journey in data science using Python.

10. AI UNLOCKED SESSION

On 30th January 2026, a technical outreach session titled “AI Unlocked” was conducted for students of Government PUC, Thirthahalli, with the objective of introducing emerging advancements in Artificial Intelligence and Machine Learning. The session provided a structured overview of AI/ML fundamentals, evolving career pathways, and practical model development through hands-on demonstration. A live showcase of the startup initiative Safecloak offered participants valuable insight into innovation, entrepreneurship, and real-world application of intelligent systems. The interaction fostered curiosity, technological awareness, and aspirational thinking among the students, encouraging them to explore future-oriented domains within the rapidly advancing digital ecosystem.

11. PYTHON APPLICATION DEVELOPMENT WORKSHOP



A Hands-on Workshop on Python Application Development was conducted on 31st January 2026 for students of PES Polytechnic, with the objective of enhancing practical programming competencies and application-building skills. The workshop provided structured exposure to Python fundamentals, emphasizing real-time implementation, problem-solving approaches, and development-oriented practices. Through interactive sessions and guided exercises, participants gained valuable insight into translating theoretical concepts into functional applications, thereby bridging the gap between academic learning and industry relevance.

The program fostered active engagement and collaborative learning, enabling students to strengthen their logical thinking and coding proficiency. Emphasis was placed on developing scalable and efficient solutions, reflecting contemporary software development standards. The workshop also encouraged participants to explore innovation-driven applications of Python across diverse domains. Coordinated under academic leadership, the initiative reaffirmed the institution's commitment to outreach, experiential learning, and continuous technical skill enhancement among aspiring professionals.

12. SMART INDIA HACKATHON 2025 PARTICIPATION

We proudly record the participation of our students in the Smart India Hackathon (SIH) 2025 Grand Finale held at Pranveer Singh Institute of Technology, Kanpur, Uttar Pradesh. The team, comprising 7th Semester students — Mr. Affan Ali Khan, Mr. Mohammed Omer Khan, Mr. Abdul Rahaman M, Ms. Bhoomika D M, Ms. Zeenath Banu S, and Ms. R P Nagashri Sajjan — was led by Mr. Affan Ali Khan and mentored by Mr. Maruthi S T, Assistant Professor. Their selection for the Grand Finale reflects their strong technical foundation and innovative approach.

Demonstrating exceptional innovation, teamwork, and analytical thinking, the team effectively addressed real-world challenges on a prestigious national platform. Their performance highlighted not only their problem-solving capabilities but also their ability to collaborate, ideate, and execute impactful solutions under competitive conditions. The experience provided valuable exposure to industry-relevant problem statements, enhancing their practical knowledge and confidence. This achievement stands as a testament to the department's commitment to fostering experiential learning and continuous mentorship. Competing alongside top institutions across the country, the students brought recognition and pride to the institution. Their accomplishment further strengthens a culture of excellence, innovation, and leadership among the student community.

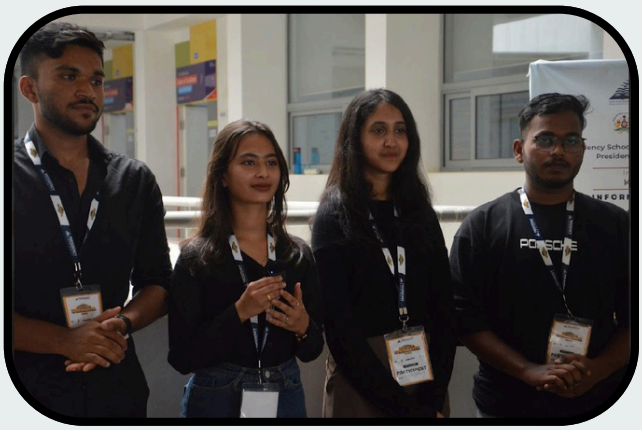
13. OPEN SOURCE INDIA 2025 PARTICIPATION

The students of Computer Science and Engineering (Data Science) visited Open Source India 2025, held in Bengaluru on 4th and 5th November 2025. During the two-day event, we had the opportunity to explore the latest advancements in open-source technologies, interact with industry experts, and attend insightful technical sessions. The experience helped us gain practical exposure to real-world innovations and strengthened our understanding of emerging trends in the open-source ecosystem.

14. SESSION ON PERPLEXITY AI

On 24th October 2025, the Astra Club conducted an engaging session on "Introduction to Perplexity AI and Comment Agent Browser." The session provided valuable insights into how AI-powered tools like Perplexity AI enhance research efficiency and how agent-based browsers streamline intelligent web interactions. Students gained hands-on exposure to modern AI-driven workflows, helping them understand the practical applications of AI in productivity, research, and automation.

15. NAMMASURAKSHA 2025 PARTICIPATION



The department proudly records the participation of its students in the 3-Day National Level Hackathon NammaSuraksha 2025, hosted at Presidency University, Bengaluru, where the team secured 11th rank among 30 teams nationwide. The experience enhanced their problem-solving skills, teamwork, and exposure to real-world challenges.

The team developed ToxiFilter, an AI-driven solution designed for real-time detection of social media harassment, integrating natural language processing techniques, secure authentication, and automated user restriction mechanisms. The experience offered valuable exposure to working under pressure, fostering teamwork, resilience, and critical thinking. Such initiatives play a significant role in enhancing practical skills and preparing students to address real-world challenges effectively.

16. HACKFEST 2025 PARTICIPATION

The department is pleased to highlight the participation of team LaserHamsters in Hackfest 2025, held at NMAMIT, Karkala, Udupi, from 18th to 20th April 2025. Competing in the FinTech track, the team secured the position of Track Runner-Up. The event provided a competitive platform for innovation and technical excellence, where the team demonstrated strong problem-solving skills and collaborative effort.

The team developed an AI-powered RBI-compliant regulatory sandbox designed to facilitate secure testing of financial innovations within a controlled environment. The solution featured an intelligent compliance check engine, a lender risk analysis platform, and an automated RBI report generation system, demonstrating strong technical execution and real-world relevance. The project effectively integrated AI-driven analysis with regulatory frameworks, highlighting its potential applicability in the fintech domain. The experience provided valuable exposure to problem-solving, innovation, and collaborative development under competitive conditions, further strengthening the students' technical and analytical capabilities.

STUDENT EXCELLENCE

NPTEL EXAM RESULTS

SL No	Name	Course
1	Affan Ali Khan	NPTEL Elite Certification Course on Python for Data Science
2	Ananya S	NPTEL Elite Certification Course on Python for Data Science
3	Kusuma A U	NPTEL Elite Certification Course on Python for Data Science
4	Nithin B	NPTEL Elite Certification Course on Python for Data Science
5	Poojitha P	NPTEL Elite Certification Course on Python for Data Science
6	Pruthvi Raju C	NPTEL Elite Certification Course on Python for Data Science
7	Sandhya kiran R	NPTEL Elite Certification Course on Python for Data Science
8	Spoorthi U K	NPTEL Elite Certification Course on Python for Data Science
9	Sushmitha U K	NPTEL Elite Certification Course on Python for Data Science
10	Ananya S -	NPTEL Elite Certification Course on Problem Solving Through Programming in C
12	Poorvika K M	NPTEL Elite Certification Course on Problem Solving Through Programming in C
13	S Tejashree	NPTEL Elite Certification Course on Problem Solving Through Programming in C
14	Poorvika K M	NPTEL Elite Certification Course on Data Analytics with Python
15	Vivek N	NPTEL Elite Certification Course on Data Analytics with Python

16	Prajna Prashant Hegde	NPTEL Elite Certification Course on Cloud Computing
17	T Kavana	NPTEL Elite Certification Course on Cloud Computing
18	Sumangala Chikalgudd	Python For Data Science Elite Certification
19	Chandana	Python for data science Elite
20	Sandhya	Python for data science Elite
21	Vishal S	Data Base management system

STUDENT EXCELLENCE

PLACED STUDENTS

ANANYA S
TOYOTA FINANCIAL SERVICES

SHRUSTI M B
EDGEVERVE

KAVANA
EDGEVERVE

SUSHMITHA U K
EDGEVERVE

KNIKIL SINGH
EDGEVERVE

R P NAGASHREE SAJJAN
IDEA INFINITY

GLORY R P
EDGEVERVE

Congratulations

ARTISTIC WORKS

Navya N R

3rd *Sem*

Jeevan K G

6th *Sem*

Chinmayi S M

6th *Sem*

Thank you!

“ Excellence is not an act but a habit, and we remain committed to upholding it in every step we take. ”

— Inspired by Aristotle