SES
SHIRPUR EDUCATION SOCIETY

R. C. PATEL INSTITUTE OF TECHNOLOGY

An Autonomous Institute

Approved By AICTE, New Delhi and Govt. of Maharashtra (DTE: EN - 5172)

Accredited by NAAC 'A' Grade, Bangalore.

Department of Computer Engineering

JAN-2025 TO MAY-2025



The CompVoice

News Letter for A.Y. 2024-25

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R. C. Patel Institute of Technology
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Vision of the Institute

To become a leading Institute in Technical education fostering innovation, research, ethical values, and sustainable development for the betterment of society.

Mission of the Institute

To impart high quality Technical Education through:

M1. Innovative and Interactive learning process and high quality, globally recognized instructional programs.
M2. Fostering a collaborative scientific temper among students with ethical responsibility towards the society.
M3. Preparing students from diverse backgrounds to have aptitude for employment, entrepreneurship and research with a spirit of Professionalism.
M4. To contribute to nation's sustainable development.

Vision of the Department

To provide high quality Computer Engineering education with socio-moral values.

Mission of the Department

M1 To provide state-of-the-art ICT based teaching-learning process.
M2 To groom the students to become professionally sound computer engineers to meet emerging needs of industry and society.
M3 To make the students employable professionals by inculcating ethical values.

Program Educational Objectives (PEOs) of the Department

PEO1 Graduates will have technical proficiency, lifelong learning skills to become a professional, entrepreneur and leader.
PEO2 Graduates will function effectively in diverse cultural and professional environments, respecting societal perspectives and inclusive practices.
PEO3 To foster ethical and social values to be socially responsible human being.

Program Specific Outcomes (PSOs)

PSO 1 Apply programming principles, algorithms, and data structures to design efficient software solutions and intelligent systems using structured, object-oriented, and emerging technologies.
PSO 2 Design, develop, and deploy responsive web and mobile applications integrated with databases and cloud platforms, leveraging modern frameworks and tools for digital transformation.

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From the Director's Desk



Dear Students, Faculty Members, Staff, Parents, and Esteemed Stakeholders,

I am pleased to reflect on the Academic Year 2024–2025, which marked steady academic progress and continued commitment to quality education at R. C. Patel Institute of Technology, Shirpur.

Throughout the year, the institute remained focused on promoting academic excellence, innovation, and professional ethics. Our dedicated faculty members played a key role in delivering effective teaching and mentoring, while continuously enhancing their academic and professional competencies.

Students actively participated in academic and co-curricular activities, which encouraged skill development, teamwork, and leadership. These experiences complemented classroom learning and helped prepare them for future professional challenges.

We also continued efforts to strengthen industry interaction and promote skill-oriented learning, ensuring our students are well-prepared for a dynamic and competitive environment.

I sincerely appreciate the efforts of our faculty, staff, students, and the continued support of parents and stakeholders. Let us move forward with confidence and determination to achieve greater milestones in the years ahead.

Warm regards,
Prof. Dr. Jayantrao. B. Patil
Director
R. C. Patel Institute of Technology, Shirpur

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From the HOD's Desk



It gives me great pleasure to share a brief reflection on the activities and progress of the Department of Computer Engineering during the Academic Year 2024–2025.

Throughout the year, the department remained focused on promoting academic excellence, technical competence, and continuous learning. Through various academic initiatives, technical events, workshops, and student activities, we encouraged the development of problem-solving skills, innovation, and professional readiness among our students.
The consistent efforts of our faculty members played a vital role in maintaining high academic standards and guiding students toward holistic development. I sincerely appreciate the active participation and dedication of our students, which contributed significantly to the department's achievements.

I extend my heartfelt thanks to the faculty, staff, and students for their commitment and teamwork. I am confident that our collective efforts will continue to strengthen the department and prepare our students to meet future technological challenges with confidence.

With best wishes,

Prof. Dr. Rajnikant B. Wagh
Head, Department of Computer Engineering
R. C. Patel Institute of Technology, Shirpur

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Editorial Board Message



Dear Readers,

It is a matter of great pride to present the Department Magazine of Computer Engineering for the academic year 2024–25. This publication stands as a testament to the department's commitment toward holistic student development, innovation, and professional growth.

During the academic year, the department focused on strengthening students' technical knowledge, analytical abilities, and communication skills through academic engagement, project-based learning, and exposure to emerging trends in computer engineering. The articles, achievements, and project highlights featured in this magazine demonstrate students' readiness to meet industry and societal challenges.

I sincerely commend the efforts of the student editorial team and faculty coordinators for their dedication and teamwork. I am confident that this magazine will encourage students to think critically, learn continuously, and contribute responsibly as future engineers.

Dr. Vipul D. Punjabi
Editor
Associate Professor
Department of Computer Engineering

Editorial Board Student Member



Mitesh Gajanan Chaudhari
Member



Yash Nitin Chaudhary
Coordinator



Aniket Pravin Patil
Member

R. C. Patel Institute of Technology
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Faculties Achievements



SCMIM - 2025

Ms. Punam R. Patil

Received a Certificate of Co-Authorship at the 1st International Conference on **Sustainable Communication, Machine Intelligence and Metaverse (SCMIM–2025).**
The conference was organized by MCNV Institute of Engineering in collaboration with Yuan Ze University and ETI, highlighting her research contribution at the international level.

Ms. Punam R. Patil

Received the **Best Paper Presentation Award** at the Two Days International Conference on Multidisciplinary Research in Landscape of Technology & Law (ICMRTLLA-2025) held at Bharati Vidyapeeth, New Law College, Pune.



Best Paper Presentation Award



Research Paper

Dr. Shailendra M. Pardeshi

Presented a research paper titled **"Medicinal Plant Identification using Image Processing and Machine Learning Algorithm"** at the International Conference on Emerging Trends in Engineering and Sciences (ICETES–2025). The conference was held at Jawahar Education Society's Institute of Technology, Management and Research, highlighting his valuable research contribution.

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Faculties Achievements



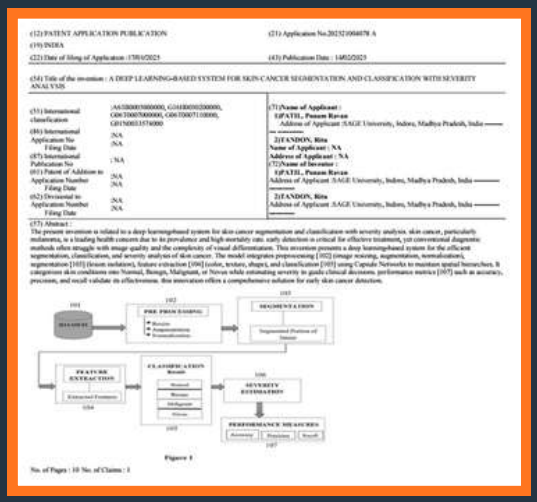
Copyright Registration

Mr. Harshal Patil

Along with Prof. Dr. Rajnikant Bhagwan Wagh, and Mr. Atul Shriram Chaudhari Have been granted a Copyright (Diary No. 3120025/2025) for the application titled **"Growing Smarter Plant Disease Detection and Farming Recommendation."**Government of India, recognizing their innovative contribution in advanced ML-based agricultural solutions.

Ms. Punam R. Patil

Published their patent application (No. 202521004078 A). The invention, **"A Deep Learning-Based System for Skin Cancer Segmentation and Classification with Severity Analysis,"** presents an advanced AI-based solution for early and accurate skin cancer detection.



Patent Application Publish



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Department Activities



CodeCraze 2.0 by GDG RCPIT

The **Department of Computer Engineering** at **R. C. Patel Institute of Technology, Shirpur,** under **GDG On Campus RCPIT**, **successfully organized CodeCraze 2.0 as part of Converges 2025**. The event, designed as an Among Us-themed 24-hour hackathon, was **conducted on 26–27 February 2025** with the **objective of encouraging innovation, collaboration, and real-world problem-solving among students.**

The hackathon was conducted in two stages. **Round 1, an online idea presentation** phase **held from 12–23 February 2025,** received an enthusiastic response with 113 teams submitting innovative project ideas, out of which **40 teams were shortlisted for the next round. Round 2, the offline prototype development round,** was organized at the Computer Centre and Language Lab of the institute, **where 160 participants (80 in-house and 80 external) worked intensively for 24 hours to transform their ideas into functional prototypes.**

Teams were **evaluated based on innovation (50%), prototype development (25%), and potential impact (25%)**. The event was assessed by an esteemed panel of **judges including Dr. Suresh Kurumbanshi, Mr. Sagar Patil, Dr. Vinodkumar R. Patil, Dr. Priti S. Sanjekar, Prof. Dr. Manoj S. Ishi, and Dr. Sudarshan S. Sonawane,** who appreciated the creativity and technical capabilities demonstrated by the participants.

The winners were awarded ₹5,000 for the first prize, ₹3,000 for the second prize, and ₹2,000 for the third prize. CodeCraze 2.0 provided students with a dynamic platform to collaborate, experiment with emerging technologies, and develop innovative solutions under time constraints, making it a memorable and impactful experience for all participants.





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Department Activities



Muggles Mystery

The **Department of Computer Engineering** at **R. C. Patel Institute of Technology, Shirpur, under E-Builders,** successfully **organized** an exciting and interactive **event titled "Muggles Mystery" as part of Converges 2025 on 27th and 28th February 2025.** The event was designed to blend technical knowledge with strategic thinking and physical challenges, providing participants with a unique and engaging competitive experience.

The primary objective of the event was to strengthen students' teamwork, communication, analytical thinking, and problem-solving abilities while creating an enjoyable learning environment. Several teams, each comprising four members, participated enthusiastically and competed across four creatively designed rounds.

The competition began with **Round 1 – Trust the Trail**, which tested coordination and teamwork through an obstacle navigation activity and a target-based scoring challenge. **Round 2 – Technical Evaluation** Round assessed participants' technical competence through tasks involving code debugging, logic-based problem solving, and responsive webpage development using Bootstrap. **Round 3 – Who is the Spy? focused** on **strategic reasoning, where participants analyzed clues and interactions to identify a hidden spy within their team.** The event concluded with **Round 4 – Mystery Round,** which introduced unexpected tasks that required quick thinking and adaptability, ultimately determining the winning team.

"Muggles Mystery" successfully created a dynamic platform that combined technical skills, critical thinking, and teamwork, making the event both challenging and enjoyable for participants while contributing to their overall skill development.





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Department Activities



The Animeverse

The **Department of Computer Engineering** at **R. C. Patel Institute of Technology, Shirpur, under the Akatsuki Coding Club**, successfully organized an exciting and intellectually engaging **event titled "The Animeverse" as part of Converges 2025**, the institute's international tech fest. **Conducted on 27th and 28th February 2025**, the event witnessed enthusiastic participation from 66 teams, each comprising three to four members, who demonstrated their coding skills, creativity, and problem-solving abilities.

The **event aimed to strengthen students' coding proficiency, logical reasoning, teamwork, and strategic thinking, while incorporating a fun and competitive environment inspired by anime themes.** The competition was conducted in multiple rounds designed to challenge participants in different aspects of technical and analytical thinking.

The **opening round, "Matrix Showdown,"** featured engaging activities such as X-O Blitz, a **life-sized Tic-Tac-Toe challenge** emphasizing speed and coordination, and Binary Unlocked, a memory-based binary conversion task supported by a custom digital system developed by the Akatsuki Coding Club. All participating teams advanced to the next stage.

The **second round, "CodeSprint 50,"** consisted of a **50-minute HackerRank coding challenge comprising 50 questions across easy, medium, and hard** difficulty levels, testing participants' coding accuracy, efficiency, and time management skills. Based on performance, the top 28 teams qualified for the final round.

The **concluding stage, "Chamber of Secrets," featured 15 progressive coding and logic-based levels,** where teams unlocked each stage using passwords generated from solved challenges. Participants could strategically utilize digital currency earned in earlier rounds to purchase hints or solutions, while a live leaderboard maintained a competitive atmosphere throughout the finale.





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Department Activities



The React Cohort

The **Department of Computer Engineering** at **R. C. Patel Institute of Technology, Shirpur, under the Akatsuki Coding Club**, successfully organized a **four-day technical workshop titled "The React Cohort" from 2nd to 5th April 2025.** The workshop was conducted exclusively for second-year students with the objective of **strengthening their skills in modern front-end development using React.js and Tailwind CSS,** along with introducing them to component-based architecture and application deployment.

A total of 98 students actively participated in the workshop, which followed a project-based learning approach. During the sessions, participants **collaboratively developed an "Online Project Selling Platform,"** gaining hands-on experience with modern web development technologies.

The workshop began with an **introduction to front-end development** concepts and JavaScript fundamentals, including variables, functions, loops, asynchronous programming, and a **basic overview of TypeScript**. Students then explored React fundamentals such as components, JSX, props, and state management using useState, along with designing responsive user interfaces using Tailwind CSS.

As the workshop progressed, participants implemented advanced concepts including React Router, useEffect, conditional rendering, and API integration using Axios, enabling them to build dynamic and scalable web applications. On the final day, students learned deployment workflows, integrating their projects with GitHub and **deploying them on Vercel, followed by project presentations and feedback sessions.**

The **workshop was inaugurated by Hon. Director Prof. Dr. J. B. Patil,** with the support of **Head of the Department Prof. Dr. R. B. Wagh, Department Coordinator Mr. M. M. Mahajan, and Faculty Coordinator Mr. S. U. More**, whose guidance contributed to the successful execution of the program.





R. C. Patel Institute of Technology
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Students Achievements



Innovation, Design and Entrepreneurship (IDE) Bootcamp

Ms. Mayuri Ravindra Chavan

Second Year Computer Engineering student, participated in the **Innovation, Design and Entrepreneurship (IDE) Bootcamp – Edition 2** (Phase II) held from 17th to 21st February 2025 at RK University, Rajkot. The bootcamp was organized by AICTE and the Ministry of Education's Innovation Cell (MIC) to promote innovation and entrepreneurial skills among students.

Ms. Ojaswini Kiran Borse

Second Year Computer Engineering student, participated in the Zonal Level (Nashik–Jalgaon Zone) **Avishkar 2025** organized by Dr. Babasaheb Ambedkar Technological University, Lonere. The event was held at Godavari Foundation's Godavari College of Engineering,



Avishkar 2025



SheInspires Women's Hackathon

Ms. Payal Patil

Third-Year Computer Engineering student, participated in the SheInspires Women's Hackathon organised by AWS in collaboration with RPG Foundation and Zensar Learning Academy. Her participation highlights her enthusiasm for innovation and women-led technological initiatives.

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Students Achievements



INNOVO SSGMCE'25

Mr. Varad Patel

Second Year Computer Engineering student, participated in the Hackathon event at **INNOVO SSGMCE'25** held on 14th and 15th February 2025 at Shri Sant Gajanan Maharaj College of Engineering, Shegaon. His participation highlights his active engagement in innovation and technical excellence.

Ms. Priyanka Ramesh Chaudhari

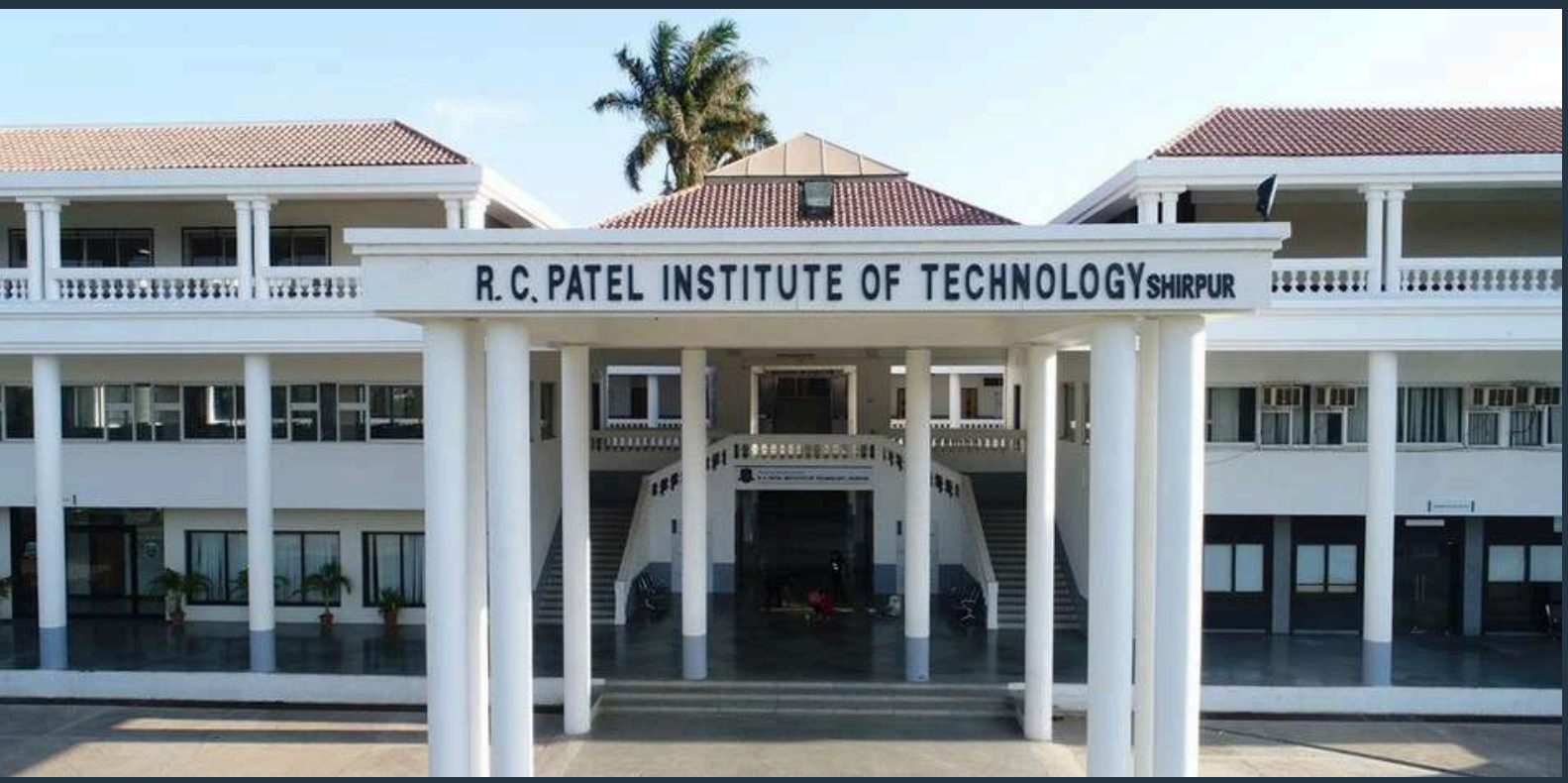
Third-year computer engineering student, secured **First Place in the Software Category at IEEE Bombay Section Technovation 2025.** The Divisional Round was held at Godavari Foundation's Godavari College of Engineering on 12th April 2025, marking a proud achievement for the institute.



IEEE Bombay Section Technovation 2025



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