



Vision of the Department

To be recognized as a Centre of Excellence in the field of Computer Engineering where learners are nurtured in scholarly environment to evolve into competent Computer Engineering professionals to benefit society

Mission of the Department

1. Evolve a curriculum which emphasizes on strong engineering fundamentals with the flexibility to choose advanced courses of interest and gain exposure to tools and techniques in Computer Engineering.
2. Encourage a teaching-learning process in which highly competent faculty share a symbiotic association with the institutes of repute.
3. Facilitate creation and dissemination of knowledge through a digitally-enabled learning environment.
4. Develop academic and infrastructural facilities with modern equipment and other learning resources and encourage reciprocal sharing with other institutes through networking.
5. Establish a centre of excellence to enhance academia – industry partnership and work on collaborative projects.

Programme Educational Objectives (PEO)

1. To enable the pursuit of knowledge in the field of Computer Engineering and contribute to the profession and employability of the students.
2. To engage in research, generate the employment through entrepreneurship and work effectively in multidisciplinary environment.
3. To understand the human, social, ethical and environmental context of their profession and contribute positively to the needs of individuals and society at large.

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CLASS OF 2025

CSI-VIT FLAGSHIP ENTHUSIA 25

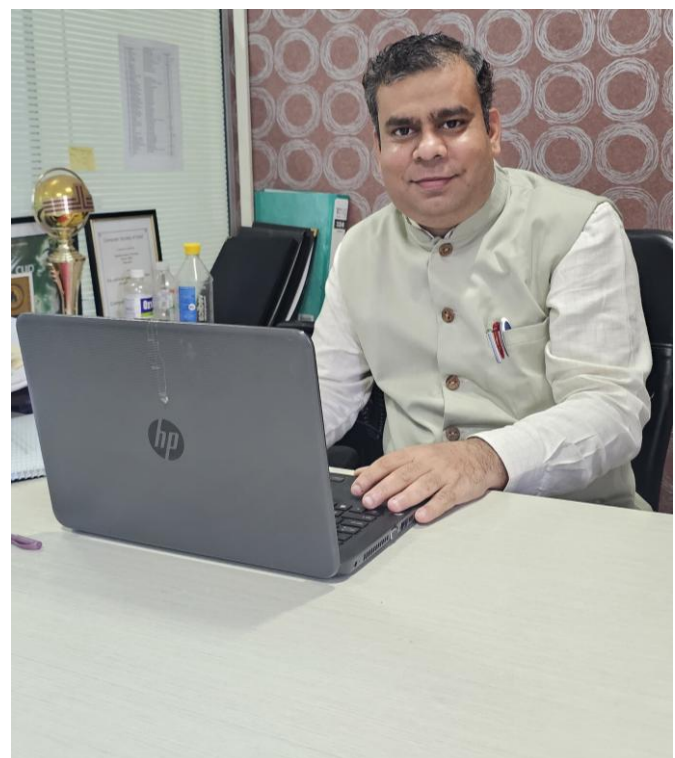
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DR. RAVINDRA SANGLE

HEAD OF DEPARTMENT, COMPUTER ENGINEERING

The April-June 2025 quarter has been a truly enriching period for the Department of Computer Engineering, marked by academic achievements, vibrant student-led initiatives, and faculty accomplishments. Our flagship events—Enthusia 2025, Plethora, and TEDxVIT – Alchemy of Change—showcased innovation, leadership, and creativity. We take immense pride in the doctoral success of four faculty members, further strengthening our academic foundation. Achieving 100% internship allotment for TE students through an industry-aligned program reflects our commitment to holistic, practical learning. Students have actively explored emerging domains like Agentic AI and gained global exposure through the Japan Edu-Cultural Tour, blending learning with cross-cultural insight. Heartfelt student reflections highlight the powerful role of mentorship, particularly the dedication of faculty who go beyond the classroom to shape confident, future-ready individuals. I extend my gratitude to all students, faculty, and staff for their continued efforts and look forward to building on this momentum with purpose and passion in the coming semester.



“The only way to learn a new programming language is by writing programs in it”
-Denis Ritchie

STAFF APPRECIATION

We are delighted to share that Prof. Prakash Parmar, Prof. Sneha A., Prof. Suvarna Sapre, and Prof. Swapnil Sonawane have successfully completed their Ph.D. in Technology. This remarkable academic milestone is a testament to their unwavering dedication, intellectual rigor, and passion for research and innovation. Their achievements not only enrich our department's academic strength but also serve as an inspiration to students and colleagues alike. We wholeheartedly congratulate each of them and look forward to the continued impact of their scholarly contributions on the academic community and beyond.

Heartiest congratulations, Dr. Parmar, Dr. Sneha, Dr. Sapre, and Dr. Sonawane!



Exploring Japan: Where Learning Meets Culture

Students from Vidyalkar Institute of Technology, Mumbai embarked on a transformative International Edu-Cultural Tour to Japan from June 3 to June 10, 2025, blending academic enrichment with cultural immersion. From the bustling streets of Tokyo to the timeless charm of Kyoto, Nara, and Osaka, every moment offered a unique learning experience. At Sophia University, students gained insights into global education and research practices. A visit to Miraikan – The National Museum of Emerging Science and Innovation opened doors to the future of robotics, space science, and sustainability. The Rinkai area tour showcased Japan's cutting-edge urban infrastructure and eco-friendly development. Traditional shrines and temples in Kyoto and Nara offered a deep dive into Japan's rich spiritual and cultural legacy. The journey concluded with a soul-stirring moment at the iconic Mount Fuji, a symbol of natural beauty and perseverance.



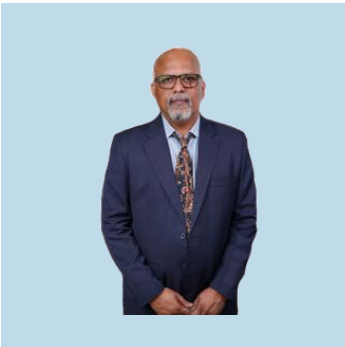
Department Staff

DR. SACHIN BOJEWAR
PROFESSOR



EDUCATION QUALIFICATION:
PhD
WORKING EXPERIENCE:
35 YEARS
AREA OF SPECIALIZATION:
Software Engineering
UI/UX

PROF. SACHIN DESHPANDE
ASSOCIATE PROFESSOR



EDUCATION QUALIFICATION:
ME
WORKING EXPERIENCE:
33 YEARS
AREA OF SPECIALIZATION:
Programming
Data Structures
Graphics
Databases
Artificial Intelligence



Talk is cheap. Show me the code.

— Linus Torvalds



Student's Speak

Anvit Bhobe

Hello, my name is Anvit Bhobe, and I am a final year Computer Engineering student at Vidyalankar Institute of Technology. I took admission to VIT in 2022 as a first year student and since I have stepped onto the campus I have been extremely pleased with the informative institute. I was extremely intrigued by the dynamic learning environment that pushed me to work hard and develop my skills to be the best among my peers. I was sure that the next four years of my life were going to be extremely exciting, and I would learn a lot. Being a part of the Computer Engineering department has been a very learning experience. As the best Department in VIT, it is renowned not just for its academically excellent professors but also because of their unwavering support and help to the students studying under them.



Anvit Bhobe TE-B

Dr. Ravindra Sangle, the HOD of the department has been helpful with any student issues and has always supported student growth. My mentor Prof. Pankaj Vanwari has provided his intellect and consistently guided me towards success. Their willingness to address and mend our personality shows me why the computer department is highly looked upon in VIT

Dr. Amit Nerurkar is another remarkable faculty member. Being extremely occupied in his own work Amit sir has yet taken time to judge me and find my talent. He has guided me by helping me contribute to various tech committees such as Computer Society of India(CSI VIT) and TEDxVIT, where I was privileged to work under him. As his TA, his mentorship and vast knowledge has given me deep insight into shaping my technical skills, critical thinking and my professionalism. All the professors in the CMPN department are committed to bring out the best in their students by encouraging them to participate in various competitions, publish research papers, etc. The professors in the CMPN department don't just teach, they shape us and develop our skills for the future

100% Internship

At Vidyalankar Institute of Technology, we constantly strive for the betterment of our students by aligning our academic initiatives with industry needs.

As part of our commitment to creating future-ready professionals, we introduced a 5-credit Internship Program for our Third-Year (TE) students. We are proud to share that we have achieved 100% internship allotment across a wide spectrum of companies and sectors.

Key Highlights of the Program:

- Industry-aligned internship curriculum
- Dedicated support from our Corporate Relations Team
- Mentorship from internal faculty and external industry guides
- Hands-on exposure to real-world tools and technologies
- Structured performance monitoring and feedback

This initiative is more than just an internship — it is a stepping stone to building professional confidence, technical skills, and industry connections.

Department congratulate Prof. Amit Aylani (Institute Internship Coordinator) and his team to for this success.

“

Programs must be written for people to read, and only incidentally for machines to execute.

— Harold Abelson

”

KNOW AN ALUMNUS: Vaishnavi Patil

Stepping into the world of engineering after completing my diploma, was both exciting and intimidating. Everyone already seemed to have their own circles, inside jokes, and comfort zones, so even though everything was online, it was easy to feel alienated. This silent fear persisted: Would I ever fit in? However, VIT gave me a sense of belonging, even if it was only virtually. It linked me not only to a course but also to people, experiences, and an undiscovered side of myself. Dr. Amit Nerurkar's encouragement was a pivotal juncture. He noticed that I had potential I wasn't aware of and encouraged me to sign up for CSI-VIT. What began as an apprehensive registration turned into a defining chapter of my journey. I got the chance to plan and host tech events, work with diverse teams, and slowly uncover a version of myself that was more confident, capable, and curious. He later introduced me to TEDxVIT and when I stepped into that role, at first it felt like I was being tossed into the pool at the

deep end, but in a good way. The possibilities, the people, and the responsibilities changed my entire viewpoint on things. He helped push me out of my insecurities (sometimes literally), changed my personality, and opened up avenues for things like writing research papers and working on projects I never thought I would do. I also was blessed with amazing counsel from many professors who didn't just teach to the syllabus, but sought to develop us into better thinkers and problem solvers. All of the encouragement, frank feedback, and belief in me affected me in a way academically and personally that I will carry forever.

It wasn't only the campus or the classes - it was the people who made VIT feel like home. I found friendships like family, with people who had my back through all the breakdowns and breakthroughs, cheering me on from the sidelines.

Outside of the classroom, I also carried something with me - my love for classical music. I had always been afraid engineering would somehow dim that light for me, or put it on the background. Instead, VIT gave me a stage. Through Apaches, I was presented with opportunities to sing, perform, and grow as a musician. It helped me retain that part of me - the artist - and I got to be good at it.

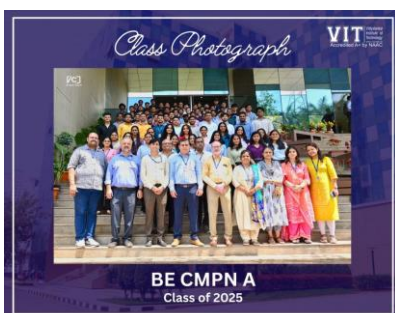
Of course when I stepped into the real world as a graduate, that was terrifying. The job, the responsibilities, the unknown (everything that comes with being a competent adult) made it feel heavier than it was. But the experiences I had in college — the projects, the people, the performances — they prepared me more than I realized. They taught me to sharpen my abilities, learn to embrace my strength, and become much more ready to face the unfathomable pastures ahead.

VIT wasn't only my college - it was my inflection point - and always will be.



Vaishnavi Patil

Computer Engineering Class of 2025



Beyond algorithms and systems, it's the passion to innovate that truly defines us. Here's to the unstoppable Computer Engineering Class of 2025 at VIT — a cohort that has not only compiled unforgettable memories but is now all set to execute bold dreams and transform ideas into impact. Wishing this remarkable batch success, resilience, and brilliance as they embark on their next journey!





The people who are crazy enough to think they can change the world are the ones who do.

— Steve Jobs



CSI-VIT Flagship Enthusia 25

2nd April to 12th April 2025

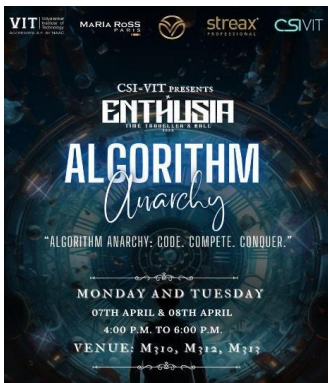


Firewall : Zero Hour (2nd April 2025 and 3rd April 2025)

As part of flagship event 'Enthusia', the CSI-VIT Chapter 2024–25 organized Firewall: Zero Hour, a two-day immersive experience designed to challenge participants' critical thinking, teamwork, and problem-solving skills through a unique, story-driven format spread across two competitive rounds. The event was a dynamic and intellectually stimulating experience that pushed all students to think outside the box. With a thrilling narrative and strategic gameplay, The event successfully fostered collaboration, innovation and well received among students.

Grab N Gasp: (4th April 2025)

The CSI-VIT Chapter 2024-25 hosted the thrilling and interactive event “Grab and Gasp”, a multi-round challenge designed to engage participants in riddles, strategy, agility, and psychological gameplay. ‘Grab and Gasp’ was a resounding success, blending riddles, games, and mindplay in a unique format. Participants not only enjoyed the adrenaline rush of each round but also demonstrated teamwork, problem-solving, and interpersonal skills.



Algorithm Anarchy : (7th April 2025 and 8th April 2025)

The CSI-VIT Chapter 2024-25 successfully organized “Algorithm Anarchy”, the third flagship event under the Enthusia 2024-25 series. Spanning across two days, the event was designed to push participants to their logical and analytical limits through pure, hands-on coding challenges. With a strict no usage of AI tools policy, the event upheld the spirit of authentic problem-solving and encouraged participants to rely solely on their programming fundamentals and teamwork.. Algorithm Anarchy served as an excellent platform for students to sharpen their problem-solving skills, collaborate under pressure, and experience algorithmic thinking in a dynamic format.

Grafana X Mumpy – Tech Conference: (12th April 2025)

Grafana X Mumpy – Mumbai Meetup, organized by CSI-VIT, was an insightful and impactful event that focused on creativity, spontaneity, and communication. Held on 12th April 2025, at M Block Auditorium, the event aimed to create awareness of technology that is used in software analytics when the app is tested and deployed. The preliminary ideology of this event was to make students and industry professionals aware and build an interest in software analytics provided by Grafana technology accelerated by MumPy

Group. The event format was centered around getting awareness between students about what software analytics is to understand the quirks of application maintenance after deployment. Participants were fully engaged and were taught different aspects required to maintain an app after deployment, strategies such as agile development and Devops were also discussed. The event gave insights into different software analytics which are used to manage software, its features and bugs when live in the market.





In the digital age, we are surrounded by a plethora of information, yet wisdom remains rare.

— Inspired by Dr. A.P.J. Abdul Kalam's vision of knowledge with purpose



CESA-VIT Flagship Plethora 25

7th April 2025 to 10th April 2025

Code Gauntlet (7th April 2025)

Code Gauntlet was an intense coding competition that tested participants beyond conventional programming skills. The event featured progressively difficult problem statements and unexpected twists designed to evaluate not only technical knowledge but also strategic thinking and mental agility. With each round, the difficulty escalated, fostering a competitive and high-energy environment where only the most skilled and composed coders advanced.



The Cryptic Chase (8th April 2025)

This event featured five engaging games, each designed to assess a unique skill set—ranging from visual memory and spatial reasoning to coordination, problem-solving, and language proficiency. Participants faced diverse challenges such as pattern replication, strategic movement, straw-based slip transfer, Morse code decoding, and vocabulary formation, making the event both dynamic and mentally stimulating. Participants experienced a fun yet intellectually challenging environment that encouraged quick thinking, creativity, and skill-based performance across multiple domains.

Brain Byte Battle (9th April 2025)

The event featured four dynamic games designed to test a broad range of skills. Participants demonstrated coordination in Cup and Balloon Balance, competed in a fast-paced Kahoot Quiz testing general knowledge, applied mental agility in an Arithmetic Equation challenge, and showcased problem-solving through a Riddle round. The event effectively combined physical skill, intellect, and lateral thinking in an engaging format. Participants enhanced their teamwork, critical thinking, and problem-solving abilities while engaging in a diverse and stimulating set of challenges.



Retro Code (10th April 2025)

Retro Code was a unique, non-traditional coding event that immersed participants in a retro-themed arena filled with deceptive code puzzles and logic traps. Rather than writing code, teams were tasked with identifying hidden bugs, pattern formations, and solving mind-bending challenges under time pressure. The event emphasized analytical thinking and precision over brute programming skill.



Agentic AI must not only act autonomously but also ethically — aligning its goals with human values, especially in a diverse society like India.

— Dr. Manish Gupta



STUDENT ARTICLE BY ISHAAN RAI: Agentic AI Systems: From Prompting to Autonomy

A few years ago, tasks like sorting emails, analyzing spreadsheets, or summarizing documents required manual effort and hours of focus. Today, these same tasks can be completed with a single click, thanks to intelligent automation powered by AI. But the landscape is shifting again. Enter agentic AI systems, which go beyond simple prompting. These systems don't just respond to commands, they understand goals, break them down, plan steps, make decisions, and act independently. This evolution from prompt based tools to autonomous agents represents a fundamental leap in how we interact with and deploy artificial intelligence.

Core Components of Agentic AI Systems

Planner: The planner is the brain behind the agent's decision making process. It takes a broad objective like "summarize this research paper" or "plan my travel itinerary" and decomposes it into manageable subtasks. This makes the agent capable of handling complex workflows, not just single step queries.

Executor: Once the plan is in place, the executor carries it out step by step. It decides what action to perform next, evaluates whether the task was successful, and adjusts if necessary. In practice, this may involve calling APIs, running code, querying data, or using tools like a web browser or calculator. The executor handles control flow, looping, conditionals, and sometimes even retries if errors occur. It's like the engine that runs the agent's brain created plan.

Memory: Memory transforms an AI from reactive to context aware. Without it, the agent is stuck in the moment. Memory is divided into Short-term memory which holds the current task context, chat history, and intermediate results like cache and Long-term memory which stores facts, prior knowledge, and past conversations or actions. Often implemented with vector databases, it enables agents to retrieve relevant past experiences and avoid redundant steps. With memory, agents can reflect, learn over time, and reference previously seen information much like humans do.

Tool Use (Environment Interfaces): Agentic AI thrives when it can extend its capabilities through tools. Tools are predefined interfaces or APIs that the agent can invoke, such as: Web search engines, File systems, Databases, Custom APIs (e.g., for weather, finance, health), Browsers or scrapers. Tools are how agents interact with the external world, giving them actuation ability beyond text generation. Tool use is often modular, enabling domain specific or role based agents.

Feedback Loop: A key component of autonomy is the ability to self-evaluate **and** adapt. The feedback loop allows an agent to assess the success or failure of its actions, adjust its strategy or replan as needed, incorporate external critique like a human in the loop. Some frameworks implement feedback loops through reward functions, error checking, or a meta agent that observes the main agent's behavior. Without this, agents risk blindly executing instructions without understanding context or impact.

The Road Ahead

Agentic AI systems mark a pivotal step toward truly autonomous machines capable of goal oriented behavior. By combining planning, execution, memory, tool use, and self-evaluation, they move beyond static prompts into dynamic action. The road ahead is both exciting and uncertain blending innovation with responsibility will be key to ensuring that agentic AI enhances human capability rather than replacing or misguiding it.



Ishaan Rai
TE-B

UPCOMING EVENTS

- **ORIENTATION PROGRAMME FOR SE TE AND BE IN JULY 2025.**
- **CSI WILL HOST FLAGSHIP EVENT CYBERFRAT IN SEPTEMBER 2025**
- **CESA WILL HOST WORKSHOP ON AGENTIC AI IN AUGUST 2025**

“Computer engineering is not just about machines; it is about building intelligent systems that empower humanity and shape the future.
— Dr. Vijay Bhatkar”

THE EDITORIAL TEAM

DR. AMIT K. NERURKAR
Chief Editor