Pimpri Chicnwad Education Trust's (PCET) & Nutan Maharashtra Vidya Prasarak Mandal's (NMVPM)

NUTAN MAHARASHTRA INSTITUTE OF ENGINEERING & TECHNOLOGY

TALEGAON,TAL-MAVAL, DIST- PUNE 411057

Approved by AICTE **Accredited by NAAC & NBA** **Affiliated to SPPU**

2024-25

DEPARTMENT OF COMPUTER ENGINEERING

TECHZINE

Born to solve problems

From the Principal's Desk:

Dr. S. N. Sapali

Principal, NMIET

Dear Students, Faculty, and Esteemed Readers,
As I share this message with you, I am filled with immense pride and joy at the remarkable progress and achievements of PCET's NMVPM's NMIET. Our institution continues to grow as a center of excellence in engineering and technology, thanks to the dedication, creativity, and hard work of our entire community.

In today's fast-changing world, staying curious, innovative, and resilient is essential. At NMIET, we strive not only to impart knowledge but also to nurture critical thinking, problem-solving abilities, and a spirit of lifelong learning. Every challenge you encounter here is an opportunity to develop your skills and prepare for a bright future.

I encourage each one of you to embrace these opportunities with enthusiasm and determination. Your journey at NMIET is about more than academics; it is about shaping your character, building leadership, and contributing meaningfully to society and the technological world.
Let us move forward together, pushing boundaries, exploring new ideas, and setting new standards of excellence. I am confident that with your passion and perseverance, NMIET will continue to shine as a beacon of innovation and success.

Stay motivated, keep learning, and always aim high!
Warm regards,
Principal, NMIET

From the HOD's Desk:

Dr. Prasad Dhore

Head of Department, Department of Computer Engineering

Dear Reader,

As we unveil this edition of our technical magazine, I am filled with immense pride in the progress and achievements of our Computer Engineering department. This publication is a testament to your hard work, creativity, and dedication to advancing the field of technology.

In the rapidly evolving world of computer engineering, staying curious and innovative is key. This magazine highlights not only your technical skills but also your ability to think critically and solve complex problems. Remember, each challenge you face is an opportunity to grow and excel.

I encourage you to embrace these opportunities with enthusiasm and resilience. Your journey here is not just about acquiring knowledge but about shaping the future of technology. Let this magazine inspire you to push boundaries, explore new horizons, and continue striving for excellence.

Together, let's continue to make strides in technology and set new benchmarks in the industry.
Keep innovating and stay inspired!

Sincerely,
Dr. Prasad Dhore
Head of Department, Department of Computer Engineering

Great editing transforms good writing into unforgettable storytelling

EDITORIAL COMMITTEE

Mrs.Dipamala Chaudhari

Assistant Professor

Being the Editor, I feel privileged in presenting our department magazine "TECHZINE2K25. It is designed to showcase the talents of our faculty members and students. With a sense of pride and satisfaction I would like to say that with the active support of the Management, Director, Principal, HOD, Faculty members and Students, the department magazine has come alive. I extend my thanks to the colleagues of my department for being a part of the editorial board. With all the efforts and contributions put in by the Faculty members and Students; I truly hope that the pages that follow will make some interesting reading.

Tanishka Patil

Working on this magazine provided me a chance to discover an editor, a writer and a team player within myself. I look forward for more such ventures!

Mokshada Naphade

This opportunity gave me valuable insights into the exceptional talents within my department. From innovative projects to inspiring journeys, I got a closer look at the creativity and dedication of my peers.It was an honor to contribute to a platform that showcases such brilliance.

Pinak Dhabu

It was completely a new experience for me to work for this magazine. Basically the exposure I got during this period portrayed many perspective of mine to the person within me.

Pranav Rathod

It has been a great experience to see more and explore the "TECHZINE2k25", which I believe is the best portrayal of art in science

ABOUT THE DEPARTMENT

Computer Engineering is very dynamic field and to competence with the departmental goal is to establish the state art of computing environment to develop globally competent professional with responsible citizenship. Computer Engineering has dedicated well qualified and experienced faculties. The department takes all possible initiatives to strengthen the Industry-Institute relations to provide right platform for students to bridge up the gaps. The Department has continuously upgraded the infrastructure according to the changing needs of technological environment. The Department has an excellent placement record and the students are placed in prestigious software industries. Students are always motivated to participate in various activities like Avishkar, Smart India Hackathon. The department has defined the program outcomes from accreditation point of view and all the good initiatives are undertaken to facilitate and fulfill the same.

Overview of Department :

Year of Establishment: U. G.: 2008-2009

Intake: 240 Seats

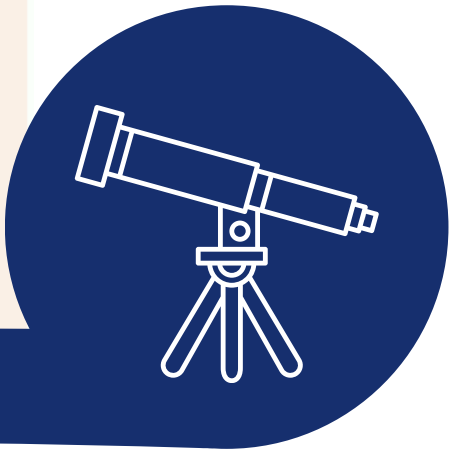
DTE Code : 631024510

Affiliated to: Savitribai Phule Pune University, Pune.

Vision and Mission
Department of Computer Engineering

VISION

“Imbibing quality Technical Education and Overall Development by Endowing Students with Societal and Ethical Skills in Computer Engineers”



MISSION

1.To impart engineering knowledge and skills by adopting effective teaching learning process.

2.To develop professional entrepreneurial and research competencies encompassing continues intellectual growth.

3.To produce educated students to exhibit social and ethical resposibilities in the working environment .

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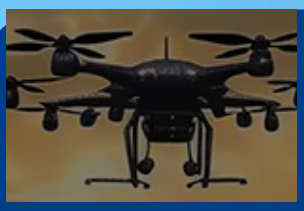


AI & Drones for Search and Rescue: Innovations Saving Lives

Raj Biradar

Search and Rescue (SAR) is a critical operation aimed at locating and aiding individuals in distress, which could be due to various reasons like getting lost during hiking, surviving natural disasters, maritime accidents, or missing persons. SAR involves multiple emergency services, including fire departments, police, coast guards, and volunteer groups. The primary goal of SAR is to minimize the time between the distress call and the rescue, as this timeframe significantly affects survival chances. Efficient SAR operations are crucial as they can be a matter of life and death. Every second counts in emergencies, and delays in response can lead to tragic outcomes. That's why improving SAR capabilities and response times is a top priority for emergency services worldwide Artificial Intelligence (AI) and drones are revolutionizing the SAR field. AI processes large amounts of data swiftly and efficiently, while drones provide aerial reconnaissance and real-time data collection. Together, AI and drones enhance the overall effectiveness of SAR missions, making them more responsive and successful. In this blog, we'll explore the vital roles that AI and drones play in SAR, their capabilities, and real-world examples of their successful implementation.

The Rise of Drones in Search and Rescue

Drones have emerged as powerful tools for SAR missions. Here's how they're making a difference:

Aerial Surveillance: Drones equipped with high-resolution cameras can provide aerial surveillance, allowing SAR teams to quickly assess the extent of a disaster or locate missing individuals in hard-to-reach areas. These aerial perspectives help teams plan their operations more effectively.

Rapid Deployment: Drones are easy to deploy and can reach areas inaccessible to traditional SAR teams, such as collapsed buildings, rough terrains, or flood zones. They reduce response times and provide valuable data to guide decision-making.

Night Vision and Thermal Imaging: Some drones are equipped with night vision and thermal imaging capabilities, enabling them to locate heat signatures and individuals in low-light or adverse conditions, which is especially useful during nighttime operations.

Communication Relays: Drones can serve as communication relays in areas with poor network connectivity, ensuring that SAR teams remain connected and can coordinate their efforts seamlessly.

The Role of Artificial Intelligence in SAR

AI plays a vital role in enhancing the effectiveness of SAR operations in several ways:

Object Detection: AI algorithms can be trained to detect humans, vehicles, and other objects in drone-captured images and video footage. This technology can help identify survivors or individuals in distress, even in cluttered environments.

Autonomous Navigation: AI enables drones to navigate autonomously, avoiding obstacles and adapting to changing environments. This autonomy allows SAR teams to focus on the mission's critical aspects rather than piloting the drone.

Data Analysis: AI can analyze large datasets from various sources, such as satellite images, weather reports, and social media feeds, to provide valuable insights into disaster conditions, helping SAR teams make informed decisions.

Predictive Analytics: AI can predict the likely locations of missing persons based on historical data, terrain analysis, and other factors, guiding search efforts more effectively.

AI and Drones in Action: The SAR Workflow

1. Area AssessmentB

efore deploying AI and drones in a SAR mission, pre-mission planning is crucial. AI algorithms are used to analyze historical data, topography, weather conditions, and other relevant information to determine the most likely areas where survivors may be located. Drones can provide a visual assessment of the terrain, helping SAR teams identify potential obstacles and hazards. This careful area assessment ensures that resources are directed to the most promising locations.

2. Resource Allocation

AI-driven tools assist in resource allocation by helping SAR teams decide which types of drones and equipment to deploy. Predictive analytics can suggest the optimal mix of drone types, sensors, and personnel for the mission. This ensures that resources are used efficiently and that the right tools are available to address the specific challenges of the operation.

3. Data Collection and Analysis

Drones are launched to collect real-time data and imagery from the search area. The collected data includes high-resolution images, video footage, thermal imaging, and other sensor data. AI algorithms then analyze this data, identifying potential survivors, hazards, or changes in the environment. The analysis helps SAR teams make informed decisions during the mission.

4. Decision Support for SAR Teams

AI provides decision support for SAR teams by rapidly processing and interpreting data. The AI system can highlight areas of interest and potential survivor locations, assisting in the allocation of ground teams and resources. During the mission, real-time communication with the drones and AI system ensures that SAR teams can adapt their strategy based on the evolving situation.

5. Evaluation of Mission Effectiveness

After the SAR mission is completed, AI plays a role in evaluating its effectiveness. The AI system compares predicted survivor locations with actual findings, helping to assess the accuracy of predictions and the success of the operation. This evaluation process provides valuable insights for continuous improvement.

6. Continuous Improvement

The data and lessons learned from each mission are used to improve future SAR operations. AI algorithms can be fine-tuned, and drone strategies can be adjusted based on post-mission assessments. The goal is to enhance the overall efficiency and success rate of SAR missions, reducing response times and increasing the chances of saving lives.

Generative AI

Prof Renuka Kajale

Introduction

Generative AI is a subset of artificial intelligence that focuses on generating new content, such as text, images, music, or code, based on patterns learned from large datasets. This technology has transformative potential for businesses and industries, enabling automation, creativity, and innovation.

What is Generative AI

Generative AI models are trained on vast amounts of data to learn patterns and relationships, which are then used to generate new content. These models can produce realistic and coherent outputs, often indistinguishable from human-created content.

Key Technologies Enabling Generative AI

Artificial Intelligence (AI): The foundation of generative AI, enabling machines to think and learn like humans.

Machine Learning (ML): A subset of AI that involves training algorithms on data to learn patterns and make predictions.

Deep Learning Models: Neural networks that simulate human brain function, used for tasks like image and speech recognition, natural language processing, and content generation.

Types of Generative AI Models

Variational Autoencoders (VAEs): Generate new content by encoding and decoding data, useful for anomaly detection and natural language generation.

Generative Adversarial Networks (GANs): Consist of generator and discriminator networks, commonly used for image and video generation.

Diffusion Models: Work by adding noise to data and then training the algorithm to diffuse the noise, revealing desired outputs.

Transformers: Enable processing entire sequences of data simultaneously, excelling at natural language processing and generation.

Applications of Generative AI

Text Generation: Writing human-like text, such as articles, emails, or chatbot responses.

Image Generation: Producing realistic images from scratch, used in industries like art, design, and entertainment.

Music Generation: Composing original music tracks.

Code Generation: Generating code for building applications.

Benefits and Challenges

Benefits: Automates tasks, enhances creativity, and improves productivity.

Challenges: Ensuring accuracy, addressing bias, and mitigating potential risks like copyright infringement.

Real-World Use Cases

Data Augmentation: Generating synthetic data to increase dataset size and diversity.

Content Creation: Automating content generation for industries like marketing, media, and entertainment.

Chatbots and Virtual Assistants: Powering conversational interfaces with human-like responses.

Generative AI's Impact on Human Life

Generative AI is increasingly involved in various aspects of human life, transforming the way we live, work, and interact with one another. Here are some key areas where generative AI is making an impact:

Creative Industries

Art and Design: Generative AI is being used to create original artwork, designs, and patterns, pushing the boundaries of human creativity.

Music and Audio: AI-generated music and audio tracks are being used in various applications, from film and video game soundtracks to personalized music playlists.

Content Creation

Writing and Journalism: Generative AI is being used to automate content generation, such as writing articles, blog posts, and social media updates.

Video and Image Generation: AI-generated videos and images are being used in industries like advertising, marketing, and entertainment.

Healthcare and Medicine

Personalized Medicine: Generative AI is being used to generate personalized treatment plans and predict patient outcomes.

Medical Imaging: AI-generated medical images are being used to help diagnose diseases and develop new treatments.

Education and Learning

Personalized Learning: Generative AI is being used to create personalized learning materials and adaptive assessments.

Intelligent Tutoring Systems: AI-powered tutoring systems are being used to provide one-on-one support to students.

Business and Industry

Automation: Generative AI is being used to automate tasks, such as data entry, customer service, and content generation.
Product Design: AI-generated product designs are being used to improve product development and innovation.

Challenges and Opportunities

While generative AI offers many benefits, it also raises important questions about:

1. Authenticity and Ownership: Who owns AI-generated content, and how do we ensure authenticity?
2. Bias and Fairness: How do we ensure that AI-generated content is fair and unbiased?
3. Job Displacement: How will AI-generated content impact jobs and industries?

By understanding the impact of generative AI on human life, we can harness its potential to drive innovation, creativity, and progress while addressing the challenges and opportunities it presents.

The Rise of AI in Creativity: A Tool or a Threat?

by Latika Ray

The Ghibli-Style Image Trend: A Case Study in AI-Generated Art

The internet has been flooded with AI-generated images mimicking the signature aesthetic of Studio Ghibli—soft, hand-painted visuals, warm color palettes, and a dreamlike atmosphere. It's easy to see why these AI-generated works are captivating. They replicate the charm of Ghibli films in seconds, giving anyone access to a style that usually takes years of practice to master. But while this trend highlights AI's growing capabilities, it also raises an important question: Is AI enhancing creativity, or is it pulling the rug out from under real artists?

The Human Touch: The Hard Work Behind a Ghibli Frame

Studio Ghibli's animation is known for its breathtaking attention to detail. Every frame is hand-drawn, carefully painted, and imbued with human emotion. A great example is Hayao Miyazaki's insistence on detail in Spirited Away (2001). One scene, where Chihiro puts on her shoes, was redrawn multiple times just to make the subtle foot movement feel natural.

Now, contrast this with AI generating a "Ghibli-style" image in mere seconds. Isn't it like handing a gold medal to a runner who never set foot on the track?

In another case, The Wind Rises (2013) involved an exhausting process where animators had to hand-draw thousands of airplane movements to achieve realistic flight sequences. Miyazaki himself worked tirelessly, even sketching and correcting frames well into his seventies. The effort behind these films isn't just about getting the style right—it's about pouring human patience, imperfection, and passion into every detail.

The Ethical Dilemma: AI as a Tool vs. AI as a Replacement

AI can generate art, write poetry, and compose music. But should it? More specifically, should it replace human artists who have spent years refining their craft?

Some argue that AI democratizes creativity, making it accessible to those without traditional artistic skills. It's true—AI can assist artists by speeding up tedious tasks like shading, color corrections, or generating rough drafts. But the real concern arises when AI stops being a tool and becomes a full-fledged replacement.

Consider this: Would studios and businesses start prioritizing AI-generated art over hiring human artists? Would the next "Ghibli-style" film be entirely AI-made, removing the human soul from the process? If creativity is the fire that fuels human expression, should we really hand over the matchstick to a machine?

Finding the Balance: Setting Limits for Ethical AI Use

If AI is to be integrated into the creative world responsibly, clear boundaries are needed. Here are a few key proposals:

1. **Clear Labeling:** AI-generated content should always be labeled as such, so audiences know what they're engaging with.
2. **Opt-in Training Data:** AI should not be trained on artists' work without their explicit consent.
3. **AI as a Support, Not a Substitute**: AI should assist artists helping with backgrounds, concept sketches, or tedious elements but never replace the human creative process entirely.
4. **Legal Protections for Artists**: Copyright laws should evolve to prevent unauthorized use of artists' work in AI training datasets.

If AI is used thoughtfully, it can enhance creativity rather than devalue it. Just as digital art tools didn't replace painters but gave them new ways to express themselves, AI should be another instrument in an artist's toolkit not a machine that takes their place.

Conclusion: Keeping the Soul of Art Alive

The excitement around AI-generated Ghibli-style images proves one thing people love art that moves them. But we must remember that real Ghibli films aren't just about aesthetics; they are about effort, patience, and emotion. AI can replicate a look, but it cannot replicate the journey of creation, the human touch, or the stories behind each brushstroke.

If we let AI overstep, we risk turning art into something hollow a shell without substance, a melody without soul.

So, before we surrender our creative spaces to algorithms, we must ask ourselves: Do we want a world where art is effortless, or one where it is meaningful?

Neurotech Unleashed: Decoding Brain-Computer Interfaces and Their Future

by Pinak Dhabu

Machine learning is a dynamic branch of artificial intelligence that empowers computers to learn from experience and data, much like humans do, without being explicitly programmed for every task. By analyzing massive datasets, these systems uncover patterns and make predictions, whether it is recognizing faces in photos, suggesting the next movie to watch, or summarizing articles in seconds. All of this is possible thanks to algorithms inspired by the human brain that improve over time. There are two main approaches. The first is supervised learning, where computers are trained with labeled examples, similar to how students learn from teachers. The second is unsupervised learning, where computers independently seek patterns in unlabeled data. From powering voice assistants to transforming healthcare, machine learning is quietly making technology smarter and more intuitive in our everyday lives.

Brain-Computer Interface (BCI)?

A Brain-Computer Interface, or BCI, is a system that lets your brain communicate directly with computers or machines, no need for speaking or moving a muscle. By picking up the brain's electrical signals, BCIs can turn your thoughts into actions, like moving a robotic arm or typing on a screen.

Types of **BCIs**

- Invasive BCIs: These involve surgery to place electrodes directly in the brain. They're very accurate but come with higher medical risks.
- Partially Invasive BCIs: Here, electrodes are put inside the skull but not into the brain itself. This method balances safety and signal quality.
- Non-Invasive BCIs: Sensors are placed on the scalp (like wearing an EEG cap). This is the safest and most accessible option, though the signals aren't as clear.

How they are used in real life:

- Prosthetic Limbs: People who have lost limbs or can't move can use BCIs to control robotic arms or hands, giving them back some independence.
- Communication Tools: For those who can't speak or move (like people with ALS), BCIs can turn brain signals into words on a screen or a computer-generated voice.

- Wheelchair Control: BCIs let people with severe mobility issues move their wheelchairs using only their thoughts.
- Gaming and VR: Some games and virtual reality systems now respond to brain signals, letting users control the action with their minds.
- Mental Health and Brain Training: Researchers are exploring BCIs for things like stress monitoring, memory improvement, and neurofeedback therapy.

Ethical and Social Issues

- Privacy and Security: Brain data is extremely personal, so protecting it from misuse or hacking is crucial as BCI tech grows.

- Informed Consent: People need to fully understand the risks and benefits before using BCIs, especially as the technology changes.
- Fair Access: There's a risk that only certain groups might be able to afford or access BCIs, which could widen social gaps.
- What Makes Us Human?: As BCIs blur the line between human and machine, questions about identity, autonomy, and agency come up.

What's Next for BCIs?

BCIs are advancing quickly. Scientists are working to make them more accurate, less invasive, and available to more people. In the future, we might see things like brain-to-brain communication, memory enhancements, and seamless connections between our brains and everyday devices. While these possibilities are exciting, they also bring new ethical questions we'll need to address.

Blockchain Technology as Web3: The Future of the Internet

by Mokshada Naphade

Introduction

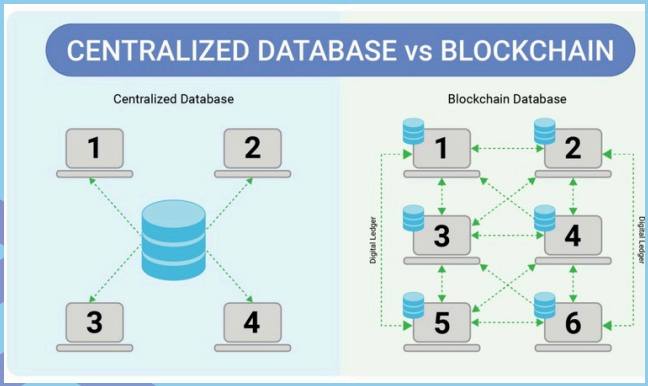
The internet has undergone significant transformations since its inception. From the static web pages of Web 1.0 to the interactive, social platforms of Web 2.0, we are now entering a new era: Web 3.0, or Web3. At the heart of this transition lies blockchain technology, which promises to reshape how data, identity, and value are handled online. Web3 represents a shift toward a decentralized, user-owned internet, offering enhanced privacy, transparency, and security.

What is Web3?

Web3 refers to the next generation of internet services that leverage blockchain, smart contracts, and decentralized networks. Unlike Web 2.0—dominated by centralized platforms like Google, Facebook, and Amazon—Web3 aims to give users control over their data, identity, and online assets.

Key features of Web3 include:

- **Decentralization:** No central authority controls the network.
- **Trustless Interactions:** Users can interact without relying on intermediaries.
- **Ownership:** Individuals have direct ownership over digital assets (e.g., NFTs, cryptocurrencies).
- **Token Economies:** Incentives are built into the system through native tokens.



Role of Blockchain in Web3

Blockchain is the backbone of Web3. It is a distributed ledger that records transactions across a network of computers in a secure, transparent, and immutable way. Here's how it supports Web3:

1. Decentralized Applications (dApps)

Blockchain enables the development of dApps, which run on decentralized networks rather than centralized servers. Examples include Uniswap (a decentralized exchange) and Lens Protocol (a decentralized social network).

2. Smart Contracts

Smart contracts are self-executing agreements written in code. They allow developers to build complex systems like DAOs (Decentralized Autonomous Organizations) without centralized control.

. Digital Identity

Web3 supports sovereign identity models where users control their credentials through blockchain-based identity solutions. This reduces reliance on third-party services for authentication

4.Digital Assets and Tokenization

Blockchain allows anything of value to be tokenized—be it art (NFTs), currency (cryptocurrencies), or real estate. These digital assets are programmable and easily transferable across Web3 platforms.

goods across a decentralized ledger.

Use Cases of Web3

Finance: DeFi (Decentralized Finance) platforms offer loans, yield farming, and trading without traditional banks.

Gaming: Play-to-earn games like Axie Infinity use tokens to reward players.

Social Media: Platforms are emerging where users own their content and data, and get paid for engagement.

Supply Chain: Transparent tracking of goods across a decentralized ledger.

Healthcare: Secure, patient-owned medical records accessible across providers.

Challenges and Criticisms

While Web3 holds immense potential, it also faces several challenges:

Scalability: Many blockchains struggle to handle large volumes of transactions quickly.

User Experience: Managing wallets, gas fees, and private keys can be difficult for non-technical users.

Regulation: Uncertainty in legal frameworks can hinder adoption.

Energy Consumption: Some blockchains (e.g., Bitcoin) have been criticized for high energy use.

The Road Ahead

Despite its challenges, Web3 is evolving rapidly. Innovations like Layer 2 scaling, zero-knowledge proofs, and green consensus mechanisms (like Ethereum's shift to Proof of Stake) are addressing technical and environmental concerns.

As more developers, companies, and users embrace this decentralized vision, blockchain-based Web3 could redefine the internet as we know it—offering greater freedom, security, and opportunity in the digital world.

Conclusion:

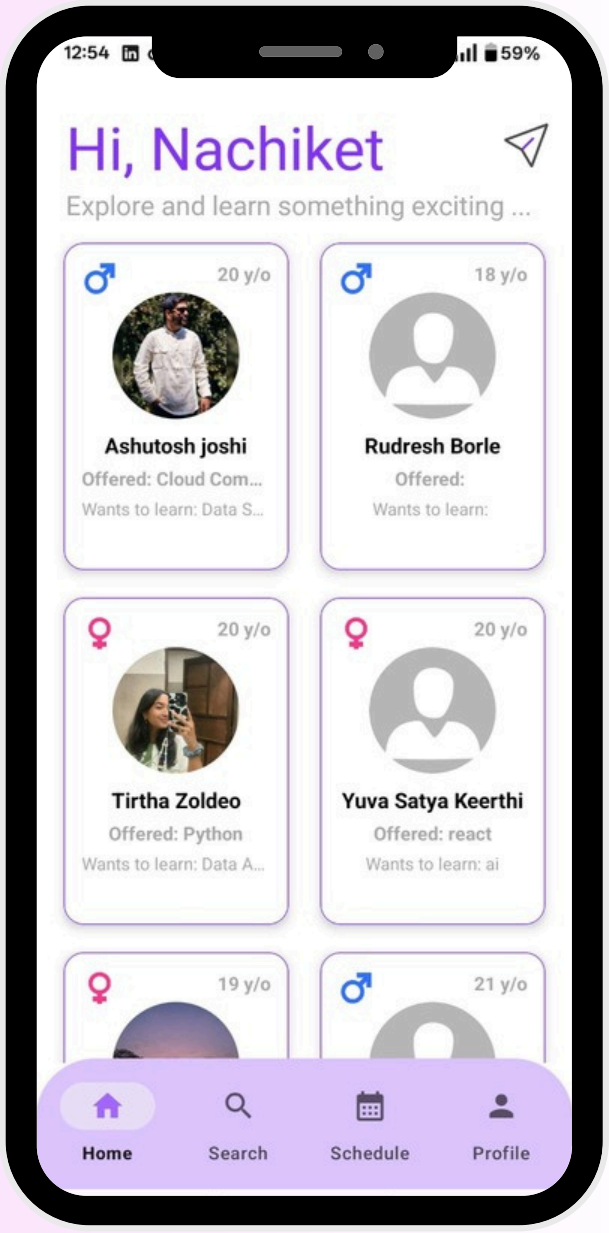
Web3, powered by blockchain technology, is more than a buzzword—it's a fundamental reimagining of how we interact online. By placing control in the hands of users and minimizing reliance on central authorities, Web3 has the potential to make the internet more democratic, secure, and innovative. The journey is still unfolding, but the foundation has been laid for a decentralized future.

android

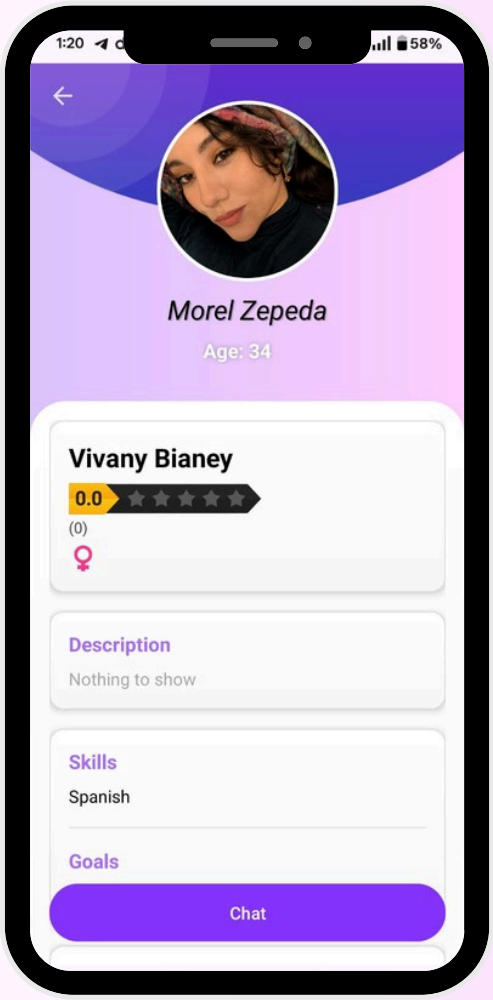
Empowering Communities Through Code: My Journey with **Connectra and GenZcrop**

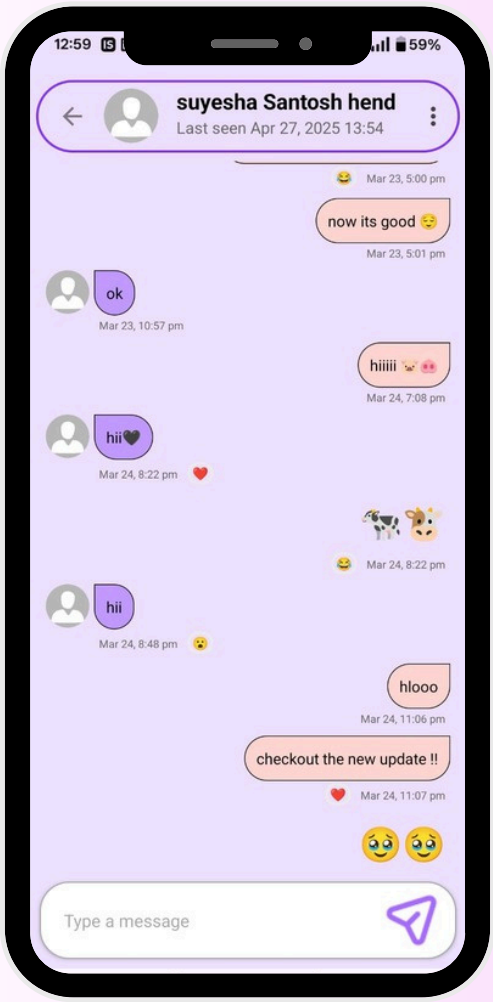
by **Nachiket Jadhav**

As a student at Nutan Maharashtra Institute of Engineering & Technology (NMIET), Pune, I've always believed that technology should be a force for good a bridge, not a barrier. Over the past year, I've poured my heart and countless hours into two projects that reflect this philosophy: Connectra and GenZcrop. These aren't just apps to me; they're my way of trying to make a difference, using the skills I've gained as an Android developer.



Connectra was inspired by my own struggles and those of my peers. Learning new skills is expensive, and too often, opportunities are limited to those who can afford them. I wanted to break that cycle. With Connectra, I set out to create a peer-to-peer platform where anyone could teach or learn a skill, completely free of cost. The idea was simple: everyone has something valuable to offer, and by connecting people directly, we can democratize education. Building Connectra wasn't easy. I had to learn Android development from scratch, wrestle with Firebase for authentication and real-time updates, and design a system where users could chat, schedule sessions, and rate each other all while keeping the experience smooth and secure. There were nights when nothing seemed to work, but the thought of making learning accessible to all kept me going. Today, Connectra allows users to showcase their skills, connect with mentors or learners, and even earn community-backed certificates. Seeing people use the platform to grow and help each other has been one of the most rewarding experiences of my life.



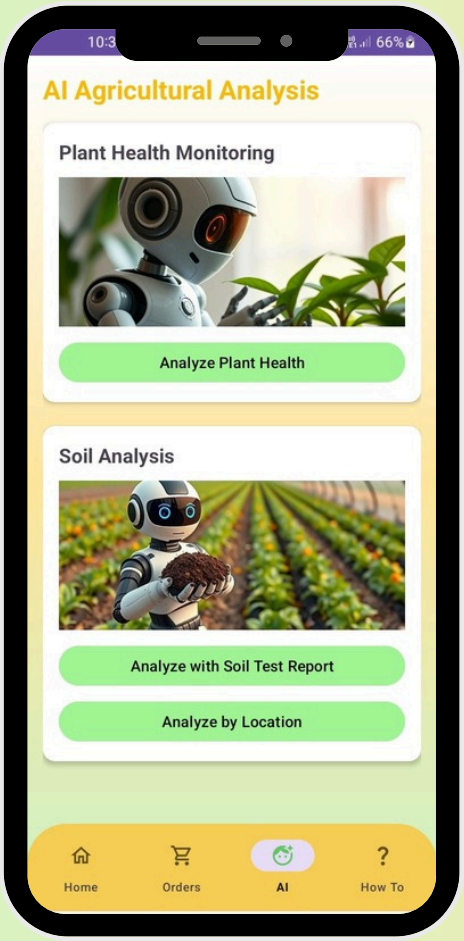


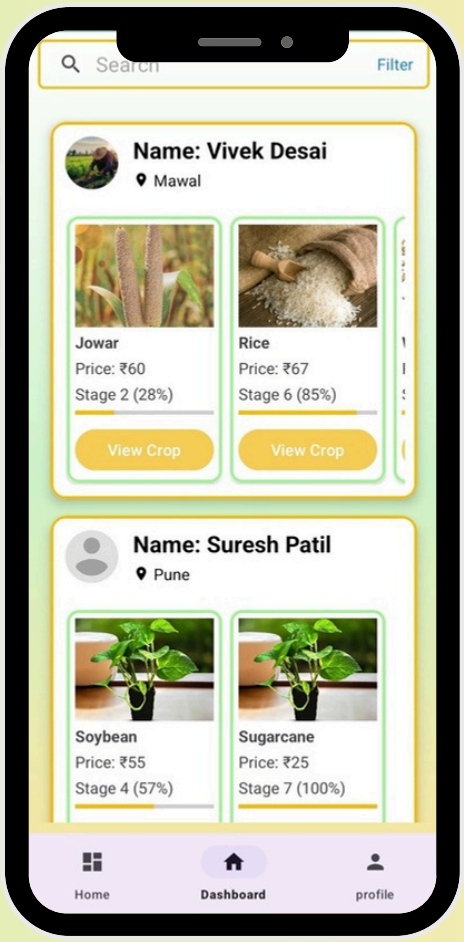
While Connectra was my attempt to bridge the education gap, GenZcrop was born from a different kind of frustration—watching how hard farmers work, only to see their profits eaten away by middlemen. During the Smart India Hackathon, my team and I decided to tackle this problem head-on. We built GenZcrop, a platform that connects farmers directly with consumers. I wanted to give farmers the power to register their crops, update their progress, and negotiate prices all through a simple, intuitive Android app. On the other side, consumers can pre-order produce, track its journey from farm to table, and support local agriculture. I had the privilege of working alongside an incredible team: Hariom Kankatti, Samruddha Kshirsagar, Atharva Belote, Yash Chaudhary, Suyesha Hend, Tanishqa Kumavat, Dhanesh Naikare, and Parth Bhagwate. Together, we integrated features like crop timelines, health updates, and Google Maps to make the process transparent and trustworthy. I still remember the excitement of seeing our first successful transaction knowing that, even in a small way, we were helping farmers get a fair deal. The technical challenges were real, from integrating payment gateways to ensuring the app worked smoothly on low-end devices, but every hurdle taught me something new about building for real-world impact.

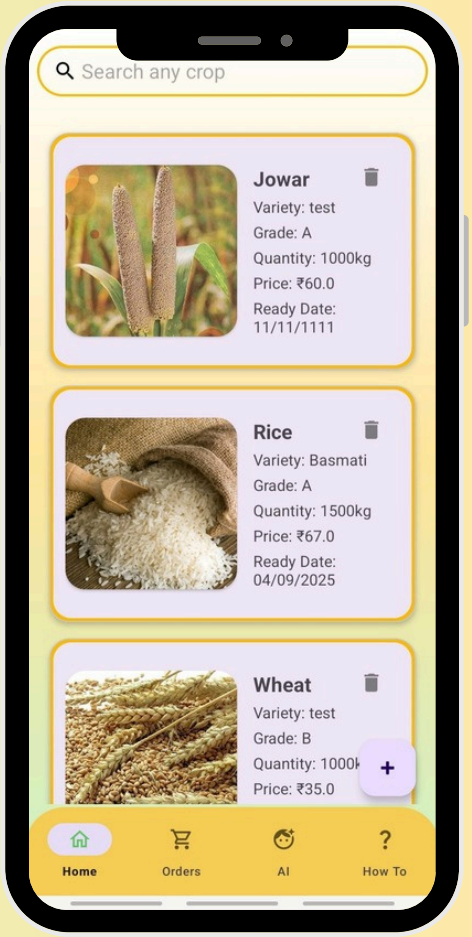
Both Connectra and GenZcrop have convinced me that Android development is not just a stepping stone it's the future of software development. With billions of devices running Android, the platform offers an incredible reach and the flexibility to innovate quickly. I've seen firsthand how open-source tools, real-time databases, and modern APIs can turn a simple idea into a solution that touches lives. Android isn't just about making apps; it's about solving problems, empowering communities, and shaping the future.

My journey hasn't been a solo one. I've learned from mentors, collaborated with friends, and drawn inspiration from the people these projects are meant to serve. There were setbacks, bugs, and moments of doubt, but each challenge made the final product stronger and made me a better developer and a more empathetic human being.

If there's one thing I'd like to share with my fellow students at NMIET and beyond, it's this: don't wait for the perfect moment or the perfect idea. Start building, keep learning, and use technology to make a difference, no matter how small. The world needs more builders, dreamers, and doers and with Android development, the possibilities are truly endless.







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GENZCROP

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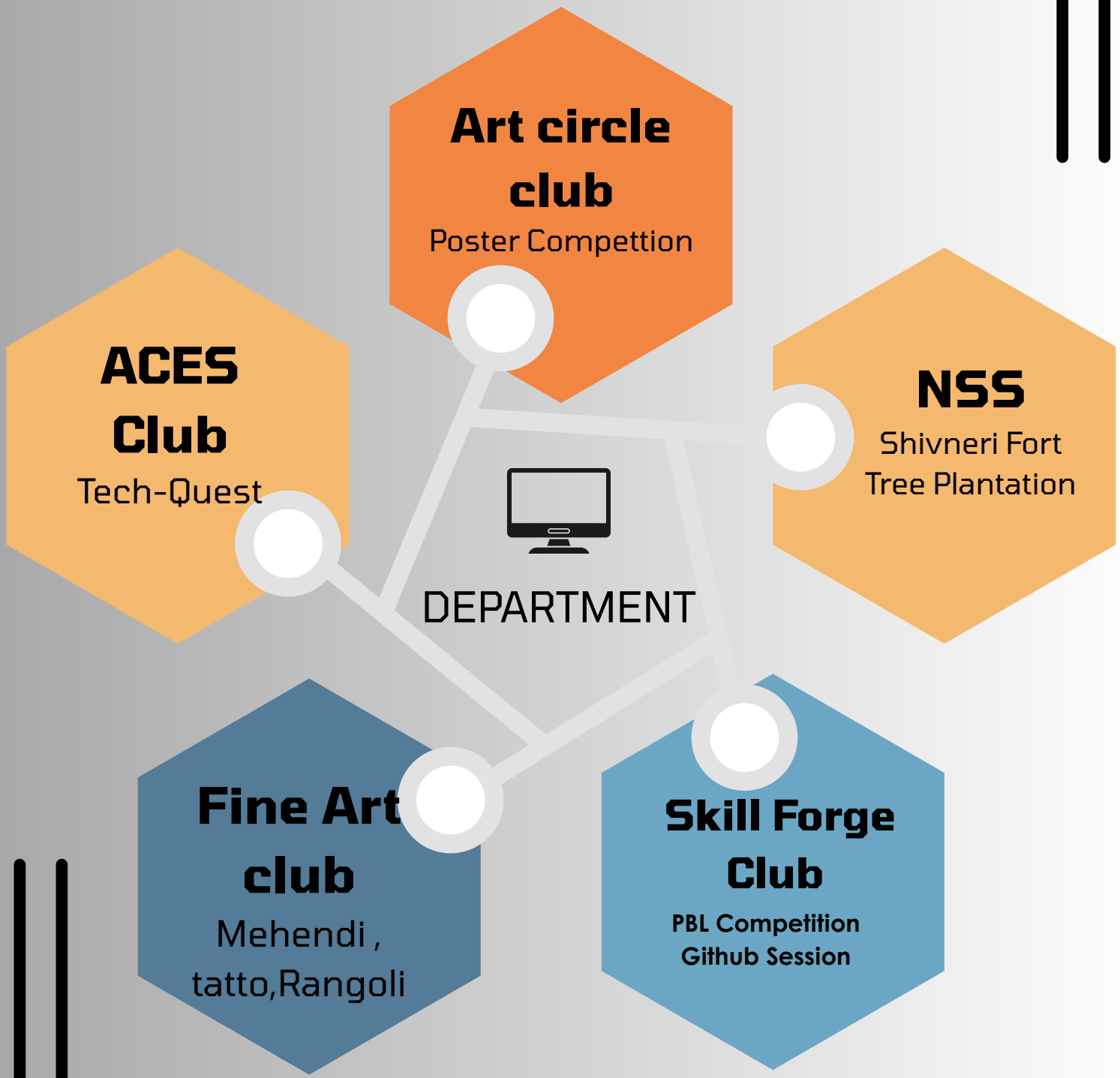

Art circle club
Poster Competition
ACES Club
Tech-Quest
NSS
Shivneri Fort
Tree Plantation
DEPARTMENT
Fine Art club
Mehendi ,
tatto,Rangoli
Skill Forge Club
PBL Competition
Github Session

ACES CLUB's EVENTS

INAGURATION & TECH REBOOT EVENT

- The ACES Inauguration and Tech Reboot event marked the introduction of the newly reformed student committee members. The event also included the conduction of three technical games to engage and challenge participants.

Event Highlights:

The inauguration successfully introduced the new committee members, with clear assignment of their roles and responsibilities.

Technical Games –

Tech Jumble –

Participating teams were given a sheet which included Jumbled technical words. Their task was to rewrite the words in unjumbled form.

Special Feature - 3D Printing Visionaries –

The task was to assemble the disassembled 3d printer in the given time.

Mr. Saurabh Bagade, Founder, Trustus 3D, was generous in providing the equipment for our competition. He and his team were present during the competition and also coordinated with us.

Keyboard Shortcuts –

It was a quiz round where each team were asked 10 questions about keyboard shortcut keys for different tasks and they had to answer them in 1 min.

Faculty Co-ordinator:-

Prof. Roshni Narkhede

TECH-QUEST 2K25

Tech-Quest 2K25 was an inter-college technical competition organized by ACES, designed to challenge and enhance students' problem-solving, creativity, and technical knowledge. The event spanned three days, featuring multiple rounds of competitions that tested participants in various domains such as technical quizzes, UI/UX design, and algorithmic problem-solving. Students participated in teams of 3-4 members, progressing through elimination rounds to ultimately determine the winners. The event aimed to foster innovation, teamwork, and hands-on learning in a competitive environment.

Activities Conducted:

Tech KBC: A quiz-based competition where teams answered 15 multiple-choice questions on an OMR sheet. The questions covered various technical topics, testing participants' knowledge and teamwork. The top 34 teams advanced to the next round.

AesthetIQs of Figma: A UI/UX design challenge where teams created an app prototype using Figma. Each team was assigned a random problem statement and evaluated based on creativity, design skills, and technical execution. The best 15 teams progressed to the final round.

AlgoArena: A two-phase coding challenge:
Phase 1: Teams solved 10 MCQ-based algorithmic questions to qualify for the next phase. The top 10 teams moved forward.
Phase 2: Each team randomly selected a chit with an algorithmic problem. They had to analyze, explain, and implement the algorithm, testing their problem-solving and coding skills under pressure. The top three teams emerged as winners.

ART CIRCLE CLUB

Poster Competition

Poster Competition Exhibition Activity conducted at NMIET on 14th August, 2024. Its primary objective was to ignite the spirit of patriotism among participants and provide a platform for them to express their understanding of freedom through artistic expression. By encouraging creativity and critical thinking, the event aimed to deepen participants' appreciation for the sacrifices made by our freedom fighters and inspire them to contribute positively to nation-building.

Faculty Co-ordinator:-
Prof. Shital jade

FINE ART CLUB

Inauguration of the Fine Arts Club and Exhibition

Date : 12 Feb 2025

Woman's Day Celebration Special :
Mehandi Competition

Date : 7 March 2025

Rangoli Competition

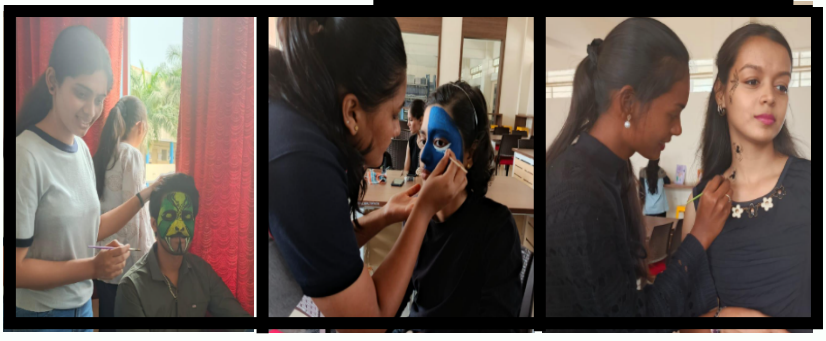
Date : 3 April 2025

Card Making

Date : 1 April 2025

Face Painting

Date : 1 April 2025



Faculty Co-ordinator:-
Prof. Renuka Kajale

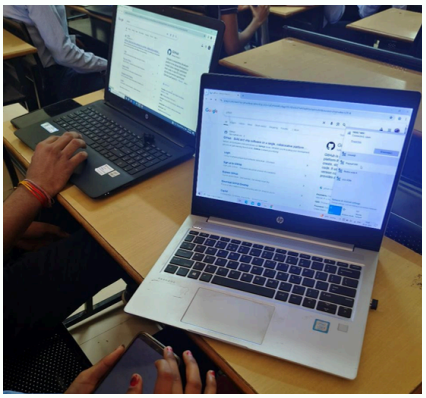
SKILL FORGE CLUB

Opening Ceremony

Team Asessment by Mr. Amol Bandal

Highlights : -

Title: Version Control with Git and GitHub – A Hands-On Workshop
(The session was engaging and insightful, boosting students confidence)
Day: Saturday **Date:** 22/03/2025
Speaker : Krushnal Patil
Faculty Co-ordinator: Prof.Rupali Kaldoke



Title: PBL Project Competition
(Encourages innovative thinking, creativity, and the ability to solve complex problems using technology)
Day: Friday **Date:** 21/03/2025
Faculty Co-ordinator :
Prof. Vaishali Dhawas

NSS

Objective of Activity:

Historical Understanding: To deepen students' understanding of the historical context and significance of the fort. This includes learning about its role in history, the people who lived there, and the events that took place.

Cultural Appreciation: To foster an appreciation for cultural heritage and the importance of preserving historical sites. Students learn about the value of protecting cultural landmarks for future generations.

Teamwork and Collaboration: To promote teamwork and collaboration through group projects related to the fort's preservation. Students work together on tasks such as creating educational materials or planning community outreach events.

Environmental Awareness: To increase awareness of environmental issues related to preservation, such as the impact of weathering and pollution. Students learn about sustainable practices in conservation.

Faculty Coordinator: Prof Rupali Kaldoke,
Prof Renuka Kajale ,
Prof Neha Bhagwat

Kille Sanvardhan Activity

Brief Description of Activity: The TE Computer Engineering students visited "Shivneri Fort" on 13th September 2024. Various conservation and redevelopment activities are being conducted at Shivneri by the Government of Maharashtra.

Activities like tree plantations, or educational workshops

·**Community Service:** Engage students in activities that benefit the local community, such as digital literacy programs, environmental conservation, and public awareness campaigns.

· **Technical Contribution:** Utilize students' technical skills to assist in village development, such as setting up computer labs, conducting workshops on basic computer usage, and promoting cybersecurity awareness.

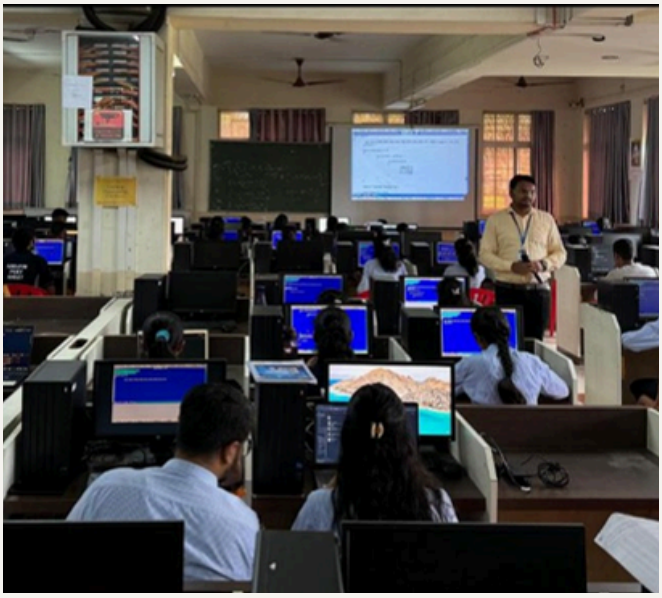
·**Social Responsibility:** Develop a sense of social responsibility and teamwork among students by encouraging them to work on social issues like health, hygiene, and education.

·**Leadership and Teamwork:** Foster leadership qualities, teamwork, and problem- solving abilities through hands-on activities and collaboration with local authorities.

·**Sustainable Development:** Promote sustainable practices like waste management, water conservation, and energy efficiency within the community.

EVENTS

Workshop on C++-Programming



Date: 23rd & 24th August 2024
Prof Satyajeet Sirsat sir conducted a two-day session on C++ programming for second year students, covering basic concepts providing knowledge of and in-depth data structures and algorithms for better understanding and application.

Workshop on Empowering Insights: Data Science and Big Data Analytics

Date: 20 March - 22 March 2025
The industry expert Mr. Yogesh Murmkar sir conducted a three-day session on Data science and Big data analytics for third year students. The workshop aims to provide students with a foundational knowledge of DSBDA, practical skills in data science and analytical modeling, and ignite their curiosity towards emerging technologies

EVENTS

“TechVision 2k25: Final Year Project Competition”

Date: 12 April 2025
Industrial expert:
Mr. Soumitra Sathe PCT technology pune.
Academic experts
Prof. Bharti Dhote
Prof. Vishal Rajput
Total 42 groups (126 students) with domain Machine Learning, Artificial intelligence, block chain, deep learning etc. are actively participated in competition.
Expert gives valuable inputs to our students & also appreciate the quality of projects, implementation work & paper publications.

Date: 8 and 9 April 2025
Speakers & Organisers: Nachiket Jadhav, Hariom Kankatti, Suyesha Hend
Volunteers: Samruddha Kshirsagar, Abhishek Bhosale, Om Pophale, Atharva Mutkule, Sujal Memane.

A two-day Android Development Bootcamp was conducted, with each session lasting two hours. The bootcamp covered Java programming from scratch, XML, and UI/UX design, enabling students to create their own calculator applications and design interfaces. A total of 125 students participated enthusiastically and received certificates upon completion. The event was successfully organized and delivered by the speakers, with excellent support from the volunteers.

Android Bootcamp

INDUSTRIAL VISITS

Industrial Visits

Theoritical Knowledge of a student helps him/her to survive or withstand in Graduation phase but practical Knowledge helps the student to withstand in real life and the experiences, learning gained from practical Knowledge is invicible. In order to make student understand how a organization works or how actually your theoratical knowledge is implemented Practically in Corporate sector.

Industrial visit @GMRT

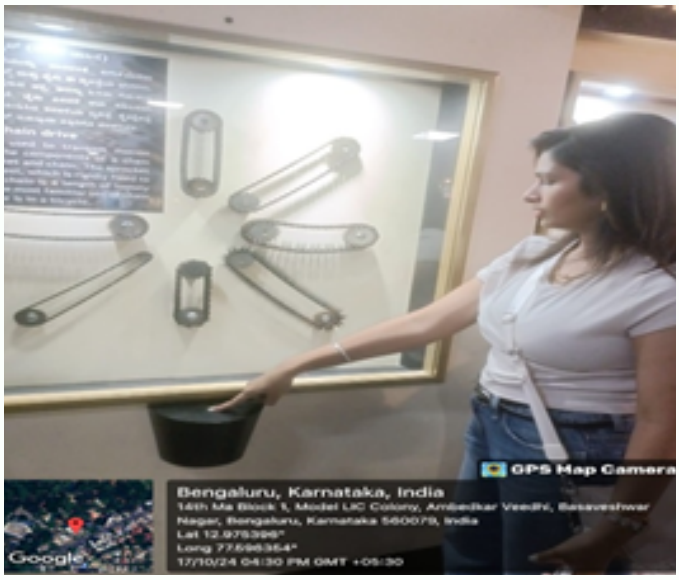
An Industrial visit to GMRT observatory was planned for T.E Computer students on 13th September 2024 by Prof Rupali Kaldoke, Prof Renuka Kajale,Neha Bhagvat

OBJECTIVE OF ACTIVITY:

- To learn about radio astronomy, the technology used in the GMRT, and the scientific research conducted. This includes understanding how radio telescopes work and their applications in studying cosmic phenomena.
- Understanding technical Challenges and Learn about the solutions and approaches employed to address these challenges Contributing to Projects and Collaborations.
- Understand Networking and signals systems.
- Research and Development Opportunities

Industrial Visits

Industrial visit @URSC Bangalore



On 17th October 2024 students of Computer Engineering Department visited the U.R. Rao Satellite Centre (URSC), Bengaluru with the faculty team consisting of Prof Rupali Kaldoke, Prof. Tushar Waykole, Prof Sonu Khapekar, Mr. Prasad Bhegade, etc.

This visit aimed to provide students with a firsthand experience of India's space program, its advancements, and the cutting-edge technologies employed in satellite development and space exploration. The U.R. Rao Satellite Centre is a premier space research organization under the Indian Space Research Organization (ISRO). It is responsible for the design, development, assembly, and integration of communication, navigation, remote sensing, scientific, and small satellite missions.

In conclusion, the industrial visit to URSC was a resounding success. It provided students with a unique opportunity to witness the advancements in India's space program and to interact with renowned scientists and engineers. This experience will undoubtedly motivate and inspire them to contribute to the future of space exploration and technology.

Industrial Visits

Industrial visit @ I-MEDITA on 7th February 2025

Industrial visit @ Bhau Innovation Center, COEP on 20th January 2025

Faculty Coordinator-
Kavyashree H N

STUDENT ACHIEVEMENTS

"Success is not the key to happiness. Happiness is the key to success."

— Robert Collier

STUDENT ACHIEVEMENTS

- Team: **Latika, Bhagyashree, Sania, and Gauri**
- Project: EmR Play
- Event: Identity Shield Summit 2025 by MiniOrange
- Award: Special Innovation Award
- Note: Appreciated for their creative and impactful idea that inspired many.

- Student: **Pradeep Misal**
- Achievements in 2025 Hackathons:
- Winner, OpenServ AI Agents Hackathon – ₹4000 prize
- 1st Runner-Up, PI-WOT Hackathon (16,000+ participants)
- 4th Runner-Up, Project Hackathon
- Top 5 Winner, Medecro.ai Hackathon (with Sandesh Khilari & Dhruvraj Nikam)

- Team Name: AgriBot
- Team Members: **Mokshada Naphade, Gayatri Gaikwad**
- Achievement: Secured 1st Prize at SRUJAN 2024, an international-level project competition.
- The team's outstanding performance and impactful project presentation earned them international recognition, with their photo and news featured in The Journal Times UK – a British national publication.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The Journal Times UK University/Campus Press Section

SRUJAN 2025 CONTINUATION...

Day 1: A Dynamic Inauguration and Hands-On Workshops

The inauguration set the stage for a series of thrilling competitions and insightful TechTalks presented by industry experts. Attendees had the opportunity to engage in hands-on training sessions covering a range of cutting-edge technologies, including Drone Technology, Artificial Intelligence (AI), Robotics, and Cybersecurity. Notably, officials from Shinawatra University contributed valuable expert sessions, enriching the participants' understanding of these advanced fields.

Dr. Pratik R. Mungekar, an eminent scientist and educator, shared his vision for the future of education and technology. The day was marked by an electrifying atmosphere of innovation and exploration, leaving attendees eager for the subsequent sessions.

Day 2 Morning Session: Keynote Addresses and Research Presentations

The second day began with a compelling keynote address by the International Guest of Honour, Dr. Pastor Arguelles Jr. from the University of Batangas. His speech provided profound insights into the evolving landscape of technology and education. Following this, Dr. D. V. Jadhav, Joint Director of the Regional Office Pune at the

- Victory Moment: Team Brand Ambassadors – 1st Place at Reignite by NIC
- Competition: Reignite Event by NIC
- Team: Team Brand Ambassadors
- Achievement: 🥇 First Place

🥇 Winning Entry Highlight :

- Analyzing the Downfall of Nokia, we identified key failures and presented a powerful revival strategy. With sharp insights and a strong 8-minute pitch, Team Brand Ambassadors clinched the top spot!

- Team Name - Team Yuga
- SMVITM National Level Hackathon 2024
- Achievement - Best Innovation Award
- Project - Smart Ed-Tech Web Application

🥇 Winning Entry Highlight :

- Team Yuga Wins Best Innovation Award at SMVITM Hackathon 2024!

Representing Nutan Maharashtra Institute of Engineering and Technology, Team Yuga stood out with their Smart Ed-Tech Web App using AR and AI to simplify complex algorithms. Their innovative approach earned them the Best Innovation Award at the 36-hour national hackathon in Udupi, Karnataka.

Team Members:

1. Shwetan Londhe (TE-Computer)
2. Suyash Rane (TE- Computer)
3. Pradnya Bagade (TE-Computer)
4. Aditya Dixit (TE-IT)

Mokshada Rajesh Naphade

~(SE Computer)

A versatile all-rounder excelling in academics, sports, and cultural events

- **1st Prize:** Ideathon(TECHMYST 2.0) by SKN IEEE Students Branch
- **1st Prize**: SRUJAN 2025 International Project Competition
- **1st Rank**: NLPC 2025 by IETE Pune(At College level)
- **2nd Rank**: Technocrats 2025 Project Competition by DY Patil COE, Varale
- **2nd Runner-Up**: Ideathon Project Competition by PCCOER
- **3rd Prize**: PBL Pioneer 2025 Contest by NMIET, Pune
- **3rd Prize**: Solve-X (TECHNOVATE2025)
- **Runner-Up**: Technobash Project Competition by GSMCOE, Pune
- **Runner-Up**: College-level Chess Competition(VIHANGAM 2025)

INNOVATE YOU
IGNITE TO INVENT

Aditi Ganesh Bankar

- Winner at CONVENE-2025 for innovative project presentation
- 3rd Place at Utkarsh 2K25 for project XRcise
- Best UI Award at Inspiron 4.0 (AI-based problem statement)
- Special Prize at HACKSPRINT V6.0, MMCOE
- Participant in 24-hour Innovate You Techathon 2.0, AISSMS IOIT

PIMPRI CHINCHWAD EDUCATION TRUST'S
Pimpri Chinchwad College of Engineering and Research, Ravet
Department of Electronics and Telecommunication

CERTIFICATE
OF EXCELLENCE

This is to certify **Aditi Bankar** from Nutan Maharashtra Institute of Engineering and Technology, Pune has secured **Third Position** in **Utkarsh 2K25, a National Project Level Competition** under the domain of **Software(AI/ML/VLSI)** organized by E&TC Department PCCOE&R on 26th March 2025, for the project entitled **XRcise**.
For demonstrating exceptional technical brilliance and innovation in this competition, we proudly present this certificate of achievement.

Prof. Arti Tekade, Faculty Co-ordinator
Dr. Kiran Napte, Faculty Co-ordinator
Dr. Rahul Mapari, E&TC HOD
Dr. Harish Tiwari, Principal

Gayatri Ramesh Gaikwad

SAMARTH RURAL EDUCATIONAL INSTITUTE'S
SAMARTH COLLEGE OF ENGINEERING & MANAGEMENT
SRUJAN 2025
INTERNATIONAL LEVEL TECHNICAL EVENT FOR DEGREE & DIPLOMA STUDENTS
Certificate
This is to certify that Mr./Ms. Gaikwad Gayatri Ramesh
of Smt. Kashibai Navale College of Engg. Pune has participated in
Project / Poster Competition & has secured 1st / 2nd / 3rd position in International Level "SRUJAN 2025"
organized by Samarth College of Engineering & Management, Belhe held on 26th March 2025.
Hon. Shri.Vivek V. Shelake, Secretary, SREI's
Hon.Shri. Vallabh V. Shelake, Executive Trustee, SREI's
Prof. Rajiv V. Sawant, Campus Director
Prof.Dr. Navnath S. Narawade, Principal, SCOE&M
Prof.Dr. Pratik R. Mungekar, Director, Research Innovation & Internationalization
Prof. Pradip S. Gadekar, Administrative Officer, SCOE&M

Achievements in 2025:

- Winner at international-level SRUJAN 2025, Samarth College of Engineering & Management
- 3rd Place in PBL Pioneer Contest at NMIET, Pune
- Recognized for innovation and technical excellence

FACULTY ACHIEVEMENTS

“Celebrating faculty success is celebrating the heart of education...”

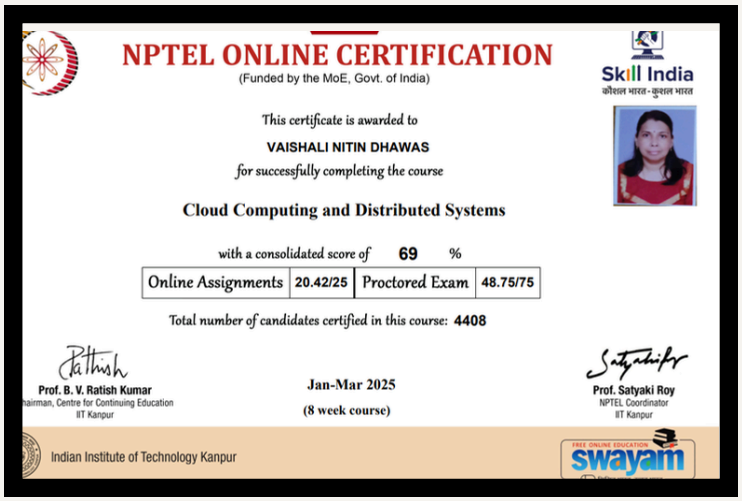
FACULTY ACHIEVEMENTS

Dr. Renuka Kajale

It is a great achievement by Dr. Renuka Kajale to complete a doctorate (PhD) in year 2025.

Prof. Vaishali Dhawas

Achievement: NPTEL Certification
Course : Cloud Computing and Distributed System



NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत-कुशल भारत

This certificate is awarded to

VAISHALI NITIN DHAWAS

for successfully completing the course

Cloud Computing and Distributed Systems

with a consolidated score of 69 %

Online Assignments	20.42/25	Proctored Exam	48.75/75

Total number of candidates certified in this course: 4408

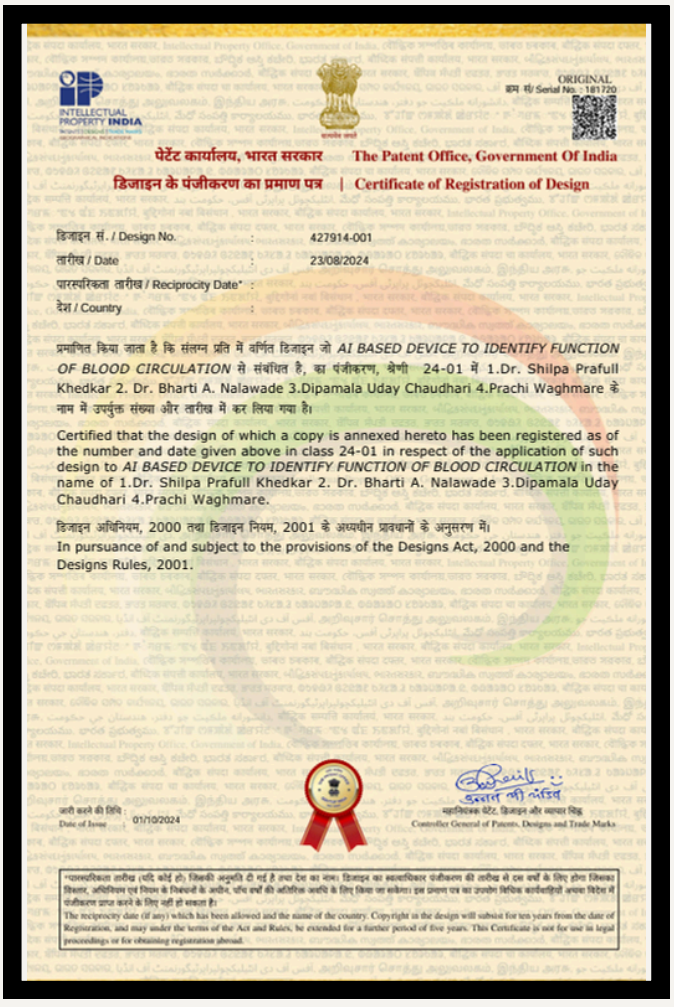
Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jan-Mar 2025
(8 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

swayam



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डिजाइन के पंजीकरण का प्रमाण पत्र | Certificate of Registration of Design

डिजाइन सं./ Design No. : 427914-001
तारीख / Date : 23/08/2024
पारस्परिकता तारीख / Reciprocity Date* :
देश / Country :

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो *AI BASED DEVICE TO IDENTIFY FUNCTION OF BLOOD CIRCULATION* से संबंधित है, का पंजीकरण, श्रेणी 24-01 में 1.Dr. Shilpa Prafull Khedkar 2. Dr. Bharti A. Nalawade 3.Dipamala Uday Chaudhari 4.Prachi Waghmare के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 24-01 in respect of the application of such design to *AI BASED DEVICE TO IDENTIFY FUNCTION OF BLOOD CIRCULATION* in the name of 1.Dr. Shilpa Prafull Khedkar 2. Dr. Bharti A. Nalawade 3.Dipamala Uday Chaudhari 4.Prachi Waghmare.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्यधीन प्रावधानों के अनुसरण में।
In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

जारी करने की तिथि
Date of Issue 01/10/2024

नियंत्रक जनरल, पेटेंट, डिजाइन और व्यापार चिह्न
Controller General of Patents, Designs and Trade Marks

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Prof. Dipamala Chaudhari
Prof. Prachi Waghmare

Patent Published.
Patent Name:-AI BASED DEVICE TO IDENTIFY FUNCTION OF BLOOD CIRCULATION

FACULTY ACHIEVEMENTS

Sr. No	Name of Faculty	Achievement / Award	Place	Date
1	Prof. Pritam Ahire	Shortlisted to attend the Republic Day Parade as Special Guest of the Government of India to witness the Republic Day Parade (RDP), 2025 at Kartavya Path on the basis of contribution to the field of Copyrights.	Delhi	20 Jan 2025
2	Prof. Pritam Ahire	Received award for Coordinator in the event of filling 89 copyrights in single day on the occasion of Hon. Shri. Krishnarao Bhegade saheb 89th birthday (my contribution is 21+ copyrights) Computer Engineering Department: Total Number of Copyrights Filed: 33, Total Students Participated: 54, Total Faculty Participated: 11	NMIET	10 Aug 2024
3	Prof. Renuka Kajale	Best Sesion Award For International Conference held at NMIET.	NMIET	1 May 20...
4	Prof. Renuka Kajale	Runner Up in Ladiz Cricket Team Sports Competition Sports Event in Vihangam 2K25	NMIET	24 Feb 2025
5	Prof. Neha Bhagwat	Best Sesion Award For International Conference held at NMIET.	NMIET	1 May 20...
6	Prof. Neha Bhagwat	Runner Up in Ladiz Cricket Team Sports Competition Sports Event in Vihangam 2K25	NMIET	24 Feb 2025

FACULTY ACHIEVEMENTS

Sr. No	Name of Faculty	Achievement / Award	Place	Date
7	Prof. Shital Jade	Runner Up in Carrom Sports Event in Vihangam 2K25	NMIET	24 Feb 20...
8	Prof. Shital Jade	Runner Up in Table Tennis Sports Event in Vihangam 2K25	NMIET	24 Feb 2025
9	Prof. Shital Jade	Runner Up in Badminton Sports Competition Sports Event in Vihangam 2K25	NMIET	24 Feb 20...

FACULTY ACHIEVEMENTS

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1	Prof. Pritam Ahire	Shortlisted to attend the Republic Day Parade as Special Guest of the Government of India to witness the Republic Day Parade (RDP), 2025 at Kartavya Path on the basis of contribution to the field of Copyrights.	Delhi	20 Jan 2025
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FACULTY ACHIEVEMENTS

- **Research Publications, patents, or research projects undertaken by faculty**

Sr. No	Name of Faculty	Research Paper / Patents / Copyrights / Book / Book Chapters	Journal Name / Vol. No. / Issue No. ISSN	Date
1	Dr. Prasad Dhore	Research Paper- Design & Development of Automatic Pesticide Spraying Machine	Vol 27 No. 3, PP- 271-279	1 May 2024
2	Dr. Prasad Dhore	Research Paper- Comparative Analysis of Materials for Chassis Design in a Three-Wheeled Electric Vehicle	Vol 27 No. 3, PP- 260-270	1 May 2024
3	Dr. Prasad Dhore	**Research Paper-** Experimental Analysis of Wear Rate and Frictional Coefficient of Various Steel Material	Vol 27 No. 3, PP- 290-301	1 May 2024
4	Dr. Prasad Dhore	**Research Paper-** Experimental Analysis of Mechanical Tests on a Plate Composed of Banana Fibre	Vol 31 No. 1s (2024), ISSN: 1074-133X PP- 141-150	1 Apr 2024
5	Dr. Prasad Dhore	**Research Paper-** GridDR: Enhancing Grid Reliability using Demand Response Program	Vol. 12 No.4 (2024), ISSN: 2147-6799. PP- 532–540	1 Jun 2024
6	Dr. Prasad Dhore	**Research Paper-** Streamlined Assessment of Railway Track Anomalies Utilizing Diverse Machine Learning Techniques	Vol (5), Issue (4), PP- 3468-3472	1 Apr 2024
7	Dr. Prasad Dhore	**Research Paper-** Proficient Examination Of Railway Track Liability Uncovering Using Dissimilar Machine Learning Procedure	Volume:06/Issue:04/ PP- 8303-8306	1 Apr 2024
8	Prof. Renuka Kajale	Book- Programming for Python (Degree- F.E. Mumbai University)	Tech-Neo Publication	1 Jan 2025

Sr. No	Name of Faculty	Research Paper / Patents / Copyrights / Book / Book Chapters	Journal Name / Vol. No. / Issue No. ISSN	Date
9	Prof. Renuka Kajale	Book- Programming for Python (Second Year Diploma- Mumbai University-)	Tech-Neo Publication	1 Jan 2025
10	Prof. Renuka Kajale	**Research Paper-** Ramification of Phone Radiation Detection and Absorbing Radiation During Slumber Time	INDIAN JOURNAL OF TECHNICAL EDUCATION Volume 47 l Special Issue l No. 1 l September 2024	1 Sept 2024
11	Prof. Renuka Kajale	**Research Paper -**Tracking of Indian Children's Immunization System for Private Hospitals using Real-Time Data	Grenze International Journal of Engineering and Technology, January Issue	1 Jan 2025
12	Prof. Renuka Kajale	**Research Paper -**Tracking of Indian Children's Immunization System for the Private Sector using Real-time Data	INDIAN JOURNAL OF TECHNICAL EDUCATION Volume 47 l Special Issue l No. 1 l September	1 Sept 2024
13	Prof. Renuka Kajale	**Research Paper** -Tracking of Indian Children's Immunization System for the Private Sector of Pune Region using Real-time Data		1 Dec 2024
14	Prof. Renuka Kajale	**Research Paper -**VacciDoc	Internationalpubls	1 Feb 2024
15	Prof. Renuka Kajale	**(Copyright)-** WaveWatch	Copyright	21 Oct 2024
16	Prof. Renuka Kajale	**Patent - Traffic Signal Controller**	Patent	12 Jul 2024

Sr. No	Name of Faculty	Research Paper / Patents / Copyrights / Book / Book Chapters	Journal Name / Vol. No. / Issue No. ISSN	Date
17	Prof. Neha Bhagwat	Ramification of Phone Radiation Detection and Absorbing Radiation During Slumber Time(ugc care)	INDIAN JOURNAL OF TECHNICAL EDUCATION Volume 47 l Special Issue l No. 1 l September 2024	1 Sept 2024
18	Prof. Neha Bhagwat	Integrating AI for Dynamic Resource Allocation and Workflow Optimization in Healthcare Management Systems(Scopus)	**ISSN-Online: 2676-7104 Volume 13 no 3**	10 Sept 2024
19	Prof. Neha Bhagwat	Book 1- Programming for Python (Degree- F.E. Mumbai University)	Tech-Neo Publication	1 Jan 2025
20	Prof. Neha Bhagwat	Book 2- Programming for Python (Second Year Diploma- Mumbai University)	Tech-Neo Publication	1 Jan 2025
21	Prof. Shital Jade	Paper Published: Efficient traffic Management System	IJCRT ISSN:2320-2882	7 Oct 2024
22	Prof. Shital Jade	Copyright Published: Expiry Indicator	L-155032/2024	7 Oct 2024
23	Prof. Sonu Khapekar	**Patent** :- Wearable Health Monitoring Device	441133-001	18 Dec 2024
24	Prof. Sonu Khapekar	**Copy Right:** OPTIGO	L-155411/2024	21 Oct 2024
25	Prof. Sonu Khapekar	Copy Right :- PREDICTION OF BRAIN TUMOR USING MONTE CARLO ALGORITHM IN AI	L-154483/2024	25 Sept 2024
26	Prof. Dipamala Chaudhari	Book:- Internet of Things	ISBN No. 978-93-6674-241-0, Scientific International Publishing House(SIPH)	1 Sept 2024
27	Prof. Dipamala Chaudhari	Patent:- AI BASED DEVICE TO IDENTIFY FUNCTION OF BLOOD CIRCULATION	Design No:- 427914-001	23 Aug 2024

28	Prof. Dipamala Chaudhari	Patent:- Compact Health Monitoring Device	Patent Application No.- 202421079556	22 Nov 2024
29	Prof. Dipamala Chaudhari	Journal paper- Gesture-Sensitive Interactive Learning Application for Preschoolers with Autism and Dyslexic Disorder(Scopus)	ICHISS2024	
30	Prof. Vaishali Dhawas	Book-1- Programming for Python (Degree- F.E. Mumbai University)	Tech-Neo Publication	1 Jan 2025
31	Prof. Vaishali Dhawas	Paper Published: Smart Campus Placement System:Graph Neural Network-Driven placement recommendation system	TIJER,ISSN:2349-9249	1 Jan 2025
32	Prof. Vaishali Dhawas	Paper Accepted - An IOT cyber security threat detection and prevention using semiprime deep neural network	SCOPUS/International Journal of Communication systems/Wiley Publication	1 Jan 2025
33	Prof. Tushar Waykole	Research Paper: A Novel NSGA-II Aproaches for Combating Advanced Persistent Threats with Machine Learning	FICTA-2024 London Metropolitan University, UK	6-7 June 2024
34	Prof. Pritam Ahire	**Research Paper:** GENERATIVE AI IN HEALTHCARE: APPLICATIONS AND IMPLICATIONS	JETIR October 2024, Volume 11, Issue 10	October, 2024

35	Prof. Pritam Ahire	**Research Paper:** CREDIT CARD READER WITH FACE RECOGNIZATION ON WEBCAM	JETIR October 2024, Volume 11, Issue 10	October, 2024
36	Prof. Pritam Ahire	**Research Paper:** IoT-Driven Non-Contact Monitoring and Predictive Analytics: Advancing Patient-Centered Healthcare	JETIR November 2024, Volume 11, Issue 11	November, 2024
37	Prof. Pritam Ahire	**Research Paper:** Integrated Waste Management and Waste-to-Energy Systems in Indian Cities: A Policy Framework and Implementation Model"	JETIR November 2024, Volume 11, Issue 11	November, 2024
38	Prof. Pritam Ahire	**(Chapter)** An Augmented Reality-Based, Personalized Healthcare Management System Using Blockchain Technology	IGI Global-10.4018/979-8-3693-5493-3.ch007	2024
39	Prof. Pritam Ahire	Patent: BRAIN-COMPUTER INTERFACE DEVICE	420541-001	9 Nov 2024
40	Prof. Pritam Ahire	(Chapter) Optimized Data Retrieval and Data Storage for Healthcare Applications	Chapter River Publishers	13 Sept 2024
41	Prof. Pritam Ahire	Copyright: Adaptive YouTube Video Recommendation System Based on User Preparation Level	26126/2024-CO/L	10 Aug 2024

42	Prof. Pritam Ahire	Copyright: AUTOMATIC DETECTION OF CRATERS & BOULDERS FROM ORBITER HIGH RESOLUTION CAMERA(OHRC) IMAGES USING AI/ML TECHNIQUES	26125/2024-CO/L	10 Aug 2024
43	Prof. Pritam Ahire	Copyright: AI & IoT based credit & debit card fraud detection using Machine Learning Algorithm	26124/2024-CO/L	10 Aug 2024
44	Prof. Pritam Ahire	Copyright: AI and IOT enabled attendance & engagement monitoring system	26123/2024-CO/L	10 Aug 2024
45	Prof. Pritam Ahire	Copyright: AI based approach for detecting, quantifying & visualizing the evolution of research using Machine learning algorithms	26122/2024-CO/L	10 Aug 2024
46	Prof. Pritam Ahire	Copyright: AI based Automatic Healthcare Management system for early detection and monitoring of cardiovascular diseases using a wearable IOT devices and deep learning models	26121/2024-CO/L	10 Aug 2024
47	Prof. Pritam Ahire	Copyright: AI-based system that predicts solar power generation using machine learning models	26120/2024-CO/L	10 Aug 2024

48	Prof. Pritam Ahire	Copyright: Automatic health monitoring system in car using in build IoT sensor in car steering	26118/2024-CO/L	P10/08/2024
49	Prof. Pritam Ahire	Copyright: Auto-Shield	26117/2024-CO/L	10 Aug 2024
50	Prof. Pritam Ahire	Copyright: Cash Withdrawal Using Mobile Phone	26116/2024-CO/L	10 Aug 2024
51	Prof. Pritam Ahire	Copyright: Centralize E-Study	26115/2024-CO/L	10 Aug 2024
52	Prof. Pritam Ahire	Copyright: CGPA to Percentage Converter	26114/2024-CO/L	10 Aug 2024
53	Prof. Pritam Ahire	Copyright: Comparative Analysis Between ANN & NB Algorithm for Heart Attack Prediction	26113/2024-CO/L	10 Aug 2024

53	Prof. Pritam Ahire	Copyright: Comparative Analysis Between ANN & NB Algorithm for Heart Attack Prediction	26113/2024-CO/L	10 Aug 2024
54	Prof. Pritam Ahire	Copyright: Expiry-Indicator	25285/2024-CO/L	10 Aug 2024
55	Prof. Pritam Ahire	Copyright: Food Rescue and Donation App	25284/2024-CO/L	10 Aug 2024
56	Prof. Pritam Ahire	Copyright: IoT Device for Transparent Blockchain Communication	26127/2024-CO/L	10 Aug 2024
57	Prof. Pritam Ahire	Copyright: Local Service Finder App	25242/2024-CO/L	10 Aug 2024
58	Prof. Pritam Ahire	Copyright: Manchester Encoding Simulator	25240/2024-CO/L	10 Aug 2024
59	Prof. Pritam Ahire	Copyright: Online Courses comparison module	25238/2024-CO/L	10 Aug 2024
60	Prof. Pritam Ahire	Copyright: Prediction of Brain Tumor Using Monte Carlo Algorithm in AI	25257/2024-CO/L	10 Aug 2024
61	Prof. Pritam Ahire	Copyright: QR based train pass system	25258/2024-CO/L	10 Aug 2024
62	Prof. Pritam Ahire	Copyright: Secured Document Storage and Transfer System using Blockchain technology	25273/2024-CO/L	10 Aug 2024
63	Prof. Pritam Ahire	Copyright: Sky Palette	25275/2024-CO/L	10 Aug 2024

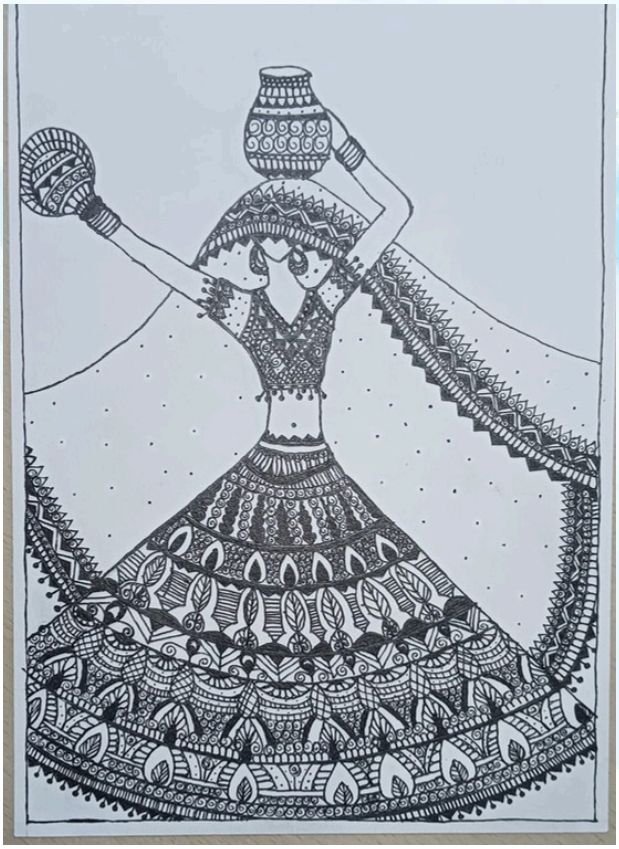
64	Prof. Pritam Ahire	Copyright: Smart Token based doctor appointments of toddlers at Paediatricians	25259/2024-CO/L	10 Aug 2024
65	Prof. Pritam Ahire	Copyright: SmartClean : Real-Time Solar Panel Cleaning Optimization Using ML, Data Science, and Cloud	25272/2024-CO/L	10 Aug 2024
66	Dr. Rohini Hanchate	(Chapter) An Augmented Reality-Based, Personalized Healthcare Management System Using Blockchain Technology	IGI Global-10.4018/979-8-3693-5493-3.ch007	
67	Dr. Rohini Hanchate	(Chapter) Optimized Data Retrieval and Data Storage for Healthcare Applications	Chapter River Publishers	13 Sept 2024
68	Dr. Rohini Hanchate	Copyright: AI & IoT based credit & debit card fraud detection using Machine Learning Algorithm	26124/2024-CO/L	10 Aug 2024
69	Dr. Rohini Hanchate	Copyright: AI and IOT enabled attendance & engagement monitoring system	26123/2024-CO/L	10 Aug 2024
70	Dr. Rohini Hanchate	Copyright: AI based approach for detecting, quantifying & visualizing the evolution of research using Machine learning algorithms	26122/2024-CO/L	10 Aug 2024

71	Dr. Rohini Hanchate	Copyright: AI based Automatic Healthcare Management system for early detection and monitoring of cardiovascular	26121/2024-CO/L	10 Aug 2024
72	Dr. Rohini Hanchate	Copyright: AI-based system that predicts solar power generation using machine learning models	26120/2024-CO/L	10 Aug 2024
73	Dr. Rohini Hanchate	Copyright: Automatic health monitoring system in car using in build IoT sensor in car steering	26118/2024-CO/L	10 Aug 2024
74	Dr. Rohini Hanchate	Copyright: Auto-Shield	26117/2024-CO/L	10 Aug 2024
75	Dr. Rohini Hanchate	Copyright: Centralize E-Study	26115/2024-CO/L	10 Aug 2024
76	Dr. Rohini Hanchate	Copyright: Comparative Analysis Between ANN & NB Algorithm for Heart Attack Prediction	26113/2024-CO/L	10 Aug 2024
77	Dr. Rohini Hanchate	Copyright: Expiry-Indicator	25285/2024-CO/L	10 Aug 2024

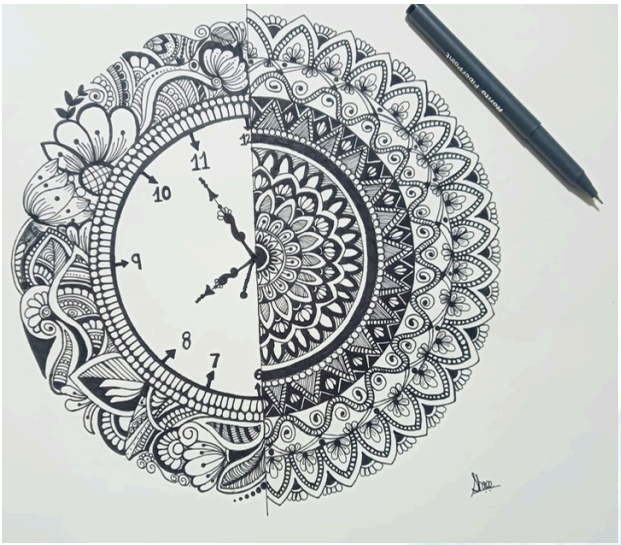
78	Dr. Rohini Hanchate	Copyright: Food Rescue and Donation App	25284/2024-CO/L	10 Aug 2024
79	Dr. Rohini Hanchate	Copyright: IoT Device for Transparent Blockchain Communication	26127/2024-CO/L	10 Aug 2024
80	Dr. Rohini Hanchate	Copyright: Local Service Finder App	25242/2024-CO/L	10 Aug 2024
81	Dr. Rohini Hanchate	Copyright: Prediction of Brain Tumor Using Monte Carlo Algorithm in AI	25257/2024-CO/L	10 Aug 2024
82	Dr. Rohini Hanchate	Copyright: QR based train pass system	25258/2024-CO/L	10 Aug 2024
83	Dr. Rohini Hanchate	Copyright: Secured Document Storage and Transfer System using Blockchain technology	25273/2024-CO/L	10 Aug 2024
84	Dr. Rohini Hanchate	Copyright: Smart Token based doctor appointments of toddlers at Paediatricians	25259/2024-CO/L	10 Aug 2024


Artistic
Works

Sketches



SHREENIDHI RITHE



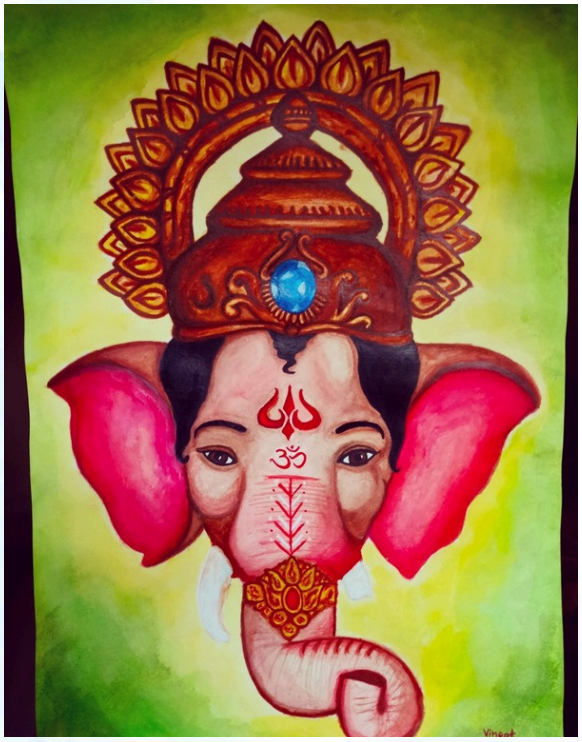
YOGESH THADKE

VINEET CHAUDHARI

LATIKA RAY

Paintings

VAISHANVI NARALE

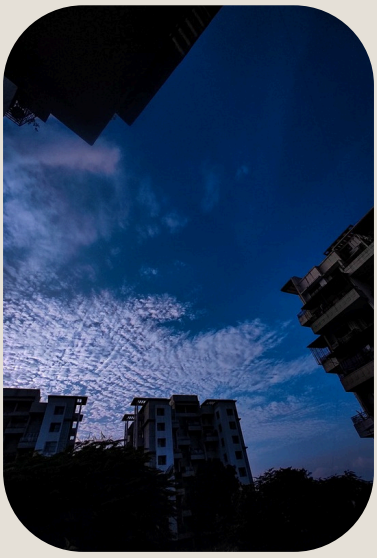


SHREENIDHI RITHE

VINEET CHAUDHARI

#Photographs

PRANAV RATHOD

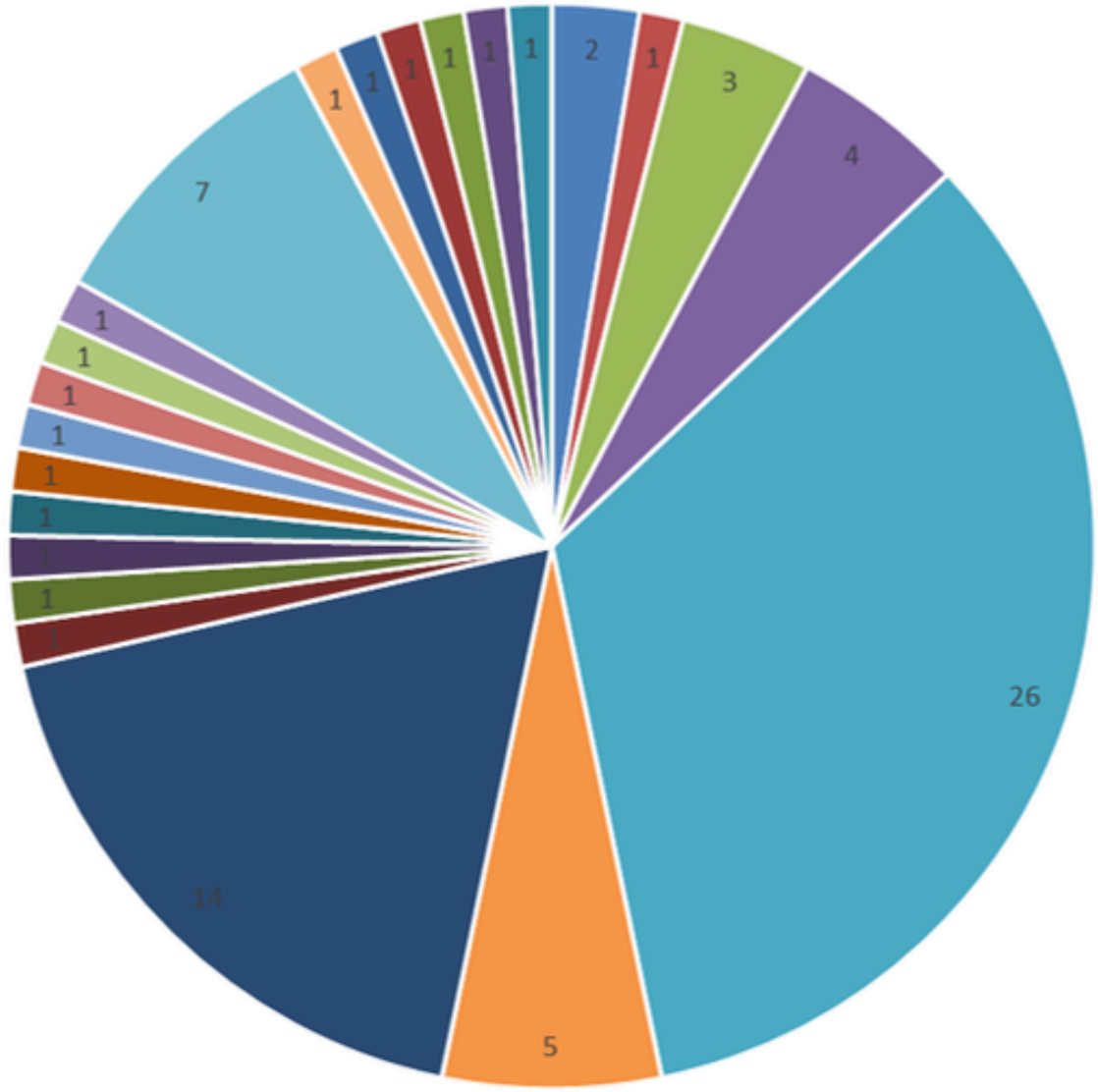


YOGESH THADKE


Placements
and
Toppers

Placement

Placed Students in 2024-25



EY GDS	Josh Software	Nice Limited	HPE
Accenture	KPIT	TechMahindra	Bajaj Finserv
CRM consultiqs	Finastra	Accops Systems	CSG Systems
Godrej Infotech	CC Tech	Connectwise	WNS
HCL	Syngenta	Coditas Solutions	Equifax Analy
Newgen Software	HSBC	Tresvista	

Placement list 2024-25			
Sr. No	**Student Name**	**Placed Company Name**	**Package Offered by Company (In LPA)**
1	Nikhil Idlgave	EY GDS	5
2	Ishan Mattoo	EY GDS,	5, 4.5
3	Krushnal Patil	Josh Software	8
4	Shivam Singh	Nice ltd, Accenture	5.75,4.5
5	Pranav Patki	Nice Ltd,Accenture	5.75,4.5
6	Vaibhav Zope	Accenture	4.5
7	Sejal Katkar	HPE	7.48
8	Sanjal Mali	HPE	7.48
9	Nidhi Badve	HPE	7.48
10	Rituja Kine	HPE	7.48
11	Harshal Shrikant Chavan	Accenture	4.5
12	Hiten Bhanushali	Accenture,KPIT	4.5, 4.5
13	Mayur Nitin Thakur	Accenture	4.5
14	Pranav Prakash Patki	Accenture	4.5
15	Ishaan Sunil Mattoo	Accenture	4.5
16	Atharva Rahul Wankar	Accenture	4.5
17	Shivam Singh	Accenture	4.5
18	Yashashree Ravindra Mahajan	Accenture	4.5

Placement list 2024-25			
Sr. No	**Student Name**	**Placed Company Name**	**Package Offered by Company (In LPA)**
19	Aniket Sanjay Kaygude	Accenture	4.5
20	Shrutika Santosh Vetal	Accenture	4.5
21	Pranav Nandkumar Khandagale	Accenture	4.5
22	Vaibhav Dharmendra Zope	Accenture	4.5
23	Uttam Jitendra Mishra	Accenture	4.5
24	Suyash Sachin Marathe	Accenture	4.5
25	Raj Anilrao Biradar	Accenture	4.5
26	Janhvi Devendra Patil	Accenture	4.5
27	Nikita Vijaykumar Gare	Accenture	4.5
28	Damini Ravindra Mali	Accenture	4.5
29	Tanvi Balasaheb Babar	Accenture	4.5
30	Ankita Singh	NICE	8
31	Samarth Mohan Bagul	KPIT	4.5
32	Riddhi Pravin Barhate	KPIT, TechMahindra	4.5, 5.5
33	Aditya Balasaheb Gaikwad	KPIT	4.5
34	Tejal Tanaji Sawale	KPIT	4.5
35	Aditya Yogesh Chaudhari	CRM consultiqs	6
36	Mrunal Laxman Pawar	Bajaj Finserv	3.5
37	Khemraj Mahajan	TechMahindra, Finastra	4, 8.5
38	Mohomad Anwaroddin Mohd Ejazuddin	Accops Systems	4
39	Sham Vijay Bornar	CSG Systems	6

Placement list 2024-25			
Sr. No	**Student Name**	**Placed Company Name**	**Package Offered by Company (In LPA)**
40	Varun Vilas Urade	Godrej Infotech	4
41	Pavankumar Pandit	TechMahindra	5.5
42	Hritik Sidana	TechMahindra	5.5
43	Pritamsingh Ratra	TechMahindra	5.5
44	Shreyas Khedkar	TechMahindra	5.5
45	Omkar Londhe	TechMahindra	5.5
46	Aishwarya Karande	TechMahindra	5.5
47	Ankita Gaganmali	TechMahindra	5.5
48	Choksh Aware	TechMahindra	5.5
49	Neha Surose	TechMahindra	5.5
50	Tejas Dhole	TechMahindra	5.5
51	Sagar Bhoge	TechMahindra	5.5
52	Sakshi Kobarne	CC Tech	6.2
53	Atharv Meher	Connectwise	10
54	Sakshi Balwadkar	Accenture	4.5
55	Tushar Waghmare	TechMahindra	5.5
56	Atharv Wankar	WNS, Accenture	8, 4.5
57	Awadhut Shedage	Accenture	4.5
58	Akanksha Balaji Karande	HCL	4.25
59	Avadhut Kulkarni	HCL	4.25
60	Samruddhi Sanjeev Jadhav	HCL	4.25
61	Atharva Bhoite	HCL	4.25

Placement list 2024-25			
Sr. No	**Student Name**	**Placed Company Name**	**Package Offered by Company (In LPA)**
62	Prathamesh Sudhir Chavan	HCL	4.25
63	Indrajeet Uttam Patil	HCL	4.25
64	Pranav Jare	HCL	4.25
65	Shreeyash Garde	Syngenta	4.5
66	Rutuja Jadhav	Coditas Solutions	6
67	Harshal Chavan	Equifax Analy	8
68	Sahil Pramod Raut	Newgen Software	4.5
69	Vaishnavi Sakpal	HSBC	9
70	Aditya Deuskar	Tresvista	4

Second Year of Engineering

GUARAV MORE
9.59

VINAYAK OJHA
9.59

MANSI MANE
9.45

Third Year of Engineering

SAHIL PATIL
9.71

RIYA SHEDGE
9.57

GUARI MACHE
9.52

Fourth Year of Engineering

VAISHANVI SAPKAL
9.85

TEJAL SAWALE
9.85

NIDHI BADVE
9.85

TECHZINE

DEPARTMENT OF COMPUTER ENGINEERING