

NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

**TULSIRAMJI GAIKWAD-PATIL**  
College of Engineering & Technology

DTE  
CODE  
4151



**NBA**  
NATIONAL BOARD  
of ACCREDITATION

— An Autonomous Institute —

DEPARTMENT OF COMPUTER SCIENCE  
AND ENGINEERING  
PRESENTS

# NEWSLETTER

Session 2023-2024



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## **Vision of Institute**

**To emerge as Learning Center of Excellence in the National Ethos in domains of Science, Technology and Management.**

## **Mission of Institute**

- **To strive for rearing standard and stature of the students by practicing high standards of professional ethics, transparency and accountability.**
- **To provide facilities and services to meet the challenges of Industry and Society.**
- **To facilitate socially responsive research, innovation and entrepreneurship.**
- **To ascertain holistic development of the students and staff members by inculcating knowledge and profession as work practices.**

## **Vision of Department**

**To become a centre of excellence for nurturing the quality Computer Science & Engineering professionals to cater the needs of industry and society.**

## **Mission of Department**

- **To achieve academic excellence by imparting in-depth knowledge to the students through effective pedagogies and hands on experience on latest tools and technologies.**
- **Inculcating professional behavior, strong ethical values, innovative research capabilities and leadership abilities in graduates.**
- **To strengthen the Industry-Institute Interaction for stakeholders to become successful entrepreneurs.**



## **About TGPCET**

**Tulsiramji Gaikwad-Patil College of Engineering and Technology (TGPCET) was established in the year 2007 by Vidarbha Bahu-uddeshiya Shikshan Sanstha (VBSS), a registered society. It is a self financed Private Engineering College, which is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU) Nagpur and is approved by All India Council for Technical Education, New Delhi. Also college is approved by Directorate of Technical Education (DTE), Mumbai, Maharashtra State. The Institute is Accredited with A+ (3.32 CGPA) by NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC). An Autonomous Institute affiliated to RTM Nagpur University, Nagpur.**

## **About Department**

**Established with B.E. CSE in the year 2007-08 with an intake of 120 and M. Tech CSE in 2011-12 with an intake of 36. Department focus on Research and training activities are based on -**

- Advanced computational methods for modeling, analyzing, and solving complex tasks in technology and science.**
- Fundamental computer science methods for the analysis of large and high- dimensional data sets For the modeling and design of complex software, networking and other computational systems.**
- Exposing students to the developments in the field of computing, thereby enabling them to meet the needs of the IT industry and research organizations in India and abroad.**

# Messages



**Dr. Mohan Gaikwad Patil**  
Chairman, Gaikwad-Patil  
Group of Institutes

I am delighted that Department of Computer Science and Engineering of Tulsiramji Gaikwad-Patil College of Engineering & Technology has published the Department magazine. The Editorial Board has done a fair job to put up facts before students, parent and community. To express one's thought, Department Magazine is the best platform and this is what our students have expressed in terms of contributions towards the magazine. I congratulate Editorial Board for unleashing the hidden potential of the student and making this Magazine a chapter of Tulsiramji Gaikwad-Patil College of Engineering.



**Dr. P. L. Naktode**  
Principal

As the principal of the college, it is my testimony here that, in the past year, despite the challenges presented by the global landscape, our students and faculty have displayed remarkable resilience and adaptability. From groundbreaking research initiatives to artistic expressions that stir the soul, each contribution adds to the unique character of our college. As we delve into the pages of this e-magazine, I encourage you to embrace the stories, insights, and accomplishments that showcase the collective spirit of our community. It is through collaboration, understanding, and a shared commitment to excellence that we continue to shape the future of our college



**Prof. Pragati Patil**  
Vice Principal

At the outset, I warmly applaud TGPCET for bringing us the latest edition of the college magazine "BYTE 23". This magazine is intended to bring out hidden literacy talent of students and faculty and also to inculcate leadership skills among them. It is a great pleasure to see the creative expressions of students who had contributed. This magazine has made an earnest attempt in this direction and brought out certain aspects of the college to the eyes of the public so that they may understand and know the college even better. I strongly believe that it would be an excellent medium through which the world can learn about the potential and achievements of TGPCET. I congratulate the members of the editorial board for their tireless efforts. Wishing the magazine, a lasting success!



# FROM THE HEAD OF THE DEPARTMENT



I'm excited to introduce "**NEWSLETTER**", our department's news dedicated to bridging the gap between academics and industry. Through insightful guest lectures, engaging industrial visits, and inspiring alumni stories, Byte Code enriches students' learning experiences and connects theoretical concepts with real-world applications. Explore Byte Code to see how we bring industry expertise to the classroom and showcase our commitment to educational excellence. Discover our department's achievements and innovations in each issue!

**Prof. Abhimanyu Dutonde**

Head of Department Computer  
science engineering

# Editorial Board

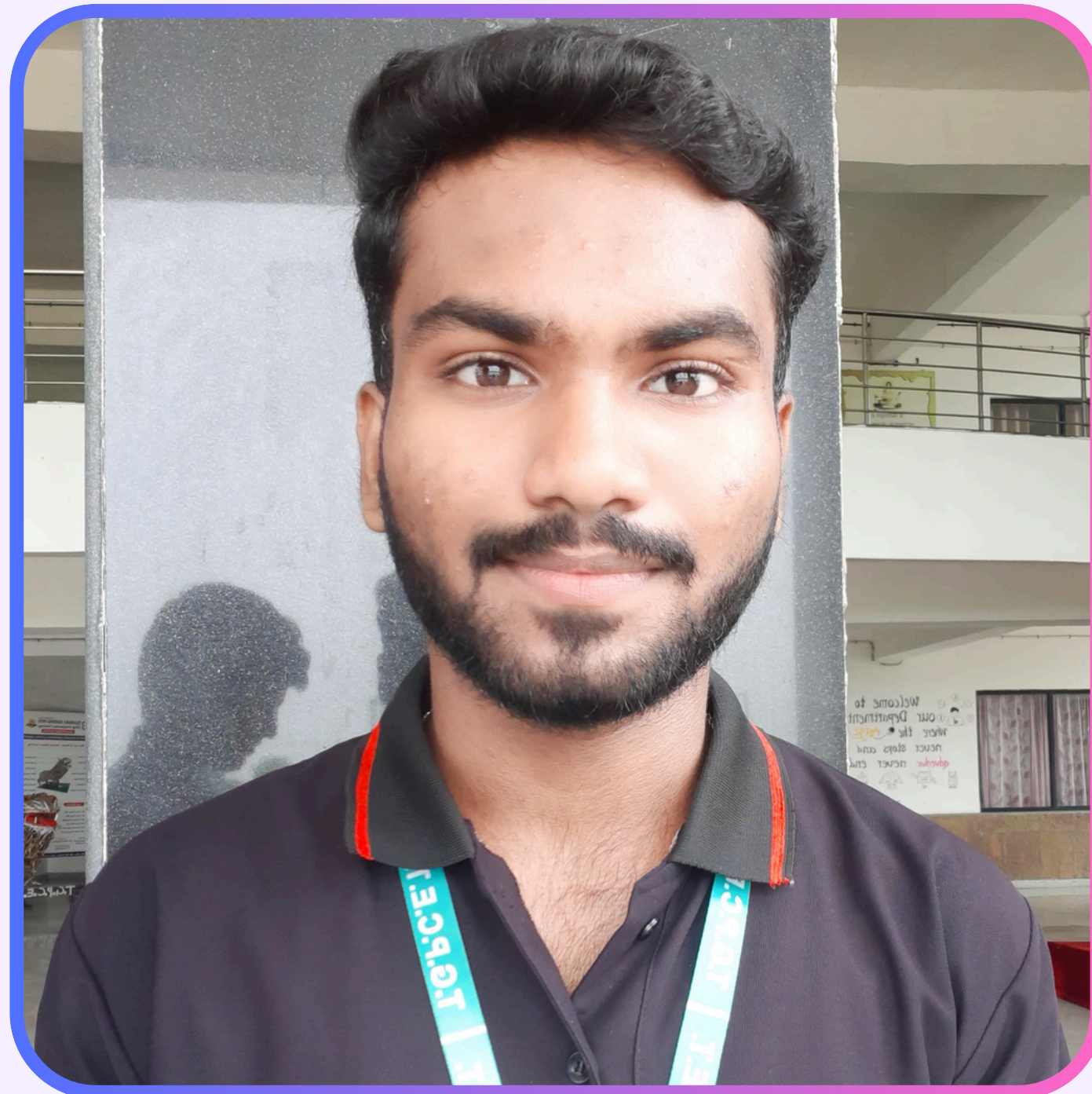


## **Prof. Shubhkirti Bodkhe**

Welcome to “**NEWSLETTER**”, that brings you the latest from our department's vibrant community of students, faculty, and alumni! As the editor, I am thrilled to present this edition, packed with stories of innovation, excellence, and achievement. From industrial visits that take our students behind the scenes of cutting-edge companies, to guest lectures that bring industry experts to our campus, we have it all. Our publications section showcases the research and ideas that are shaping the future of technology, while our alumni stories inspire us with their journeys and accomplishments. I hope you enjoy reading Byte Code as much as we enjoyed creating it. Happy reading.



# Editorial Body.



**Mr. Aditya Thakre**  
**Chief Editor**  
Branch: CSE (3rd Sem)



**Mr. Preet Gawali**  
Branch: CSE (3rd  
Sem)



**Mr. Mahesh Wadhi**  
Branch: CSE (3rd  
Sem)



**Mr. Piyush Narnaware**  
Branch: CSE (3rd Sem)



# Faculty.



**Prof. Ashvini Mahajan**



**Prof. Aditya Lavhale**



**Prof. Bramhadev  
Wadibhasme**



**Prof. Shubhkirti  
Bodkhe**



**Prof. Komal Naxine**



**Prof. Diksha Fulzele**



**Prof. Mrunali Jadhav**



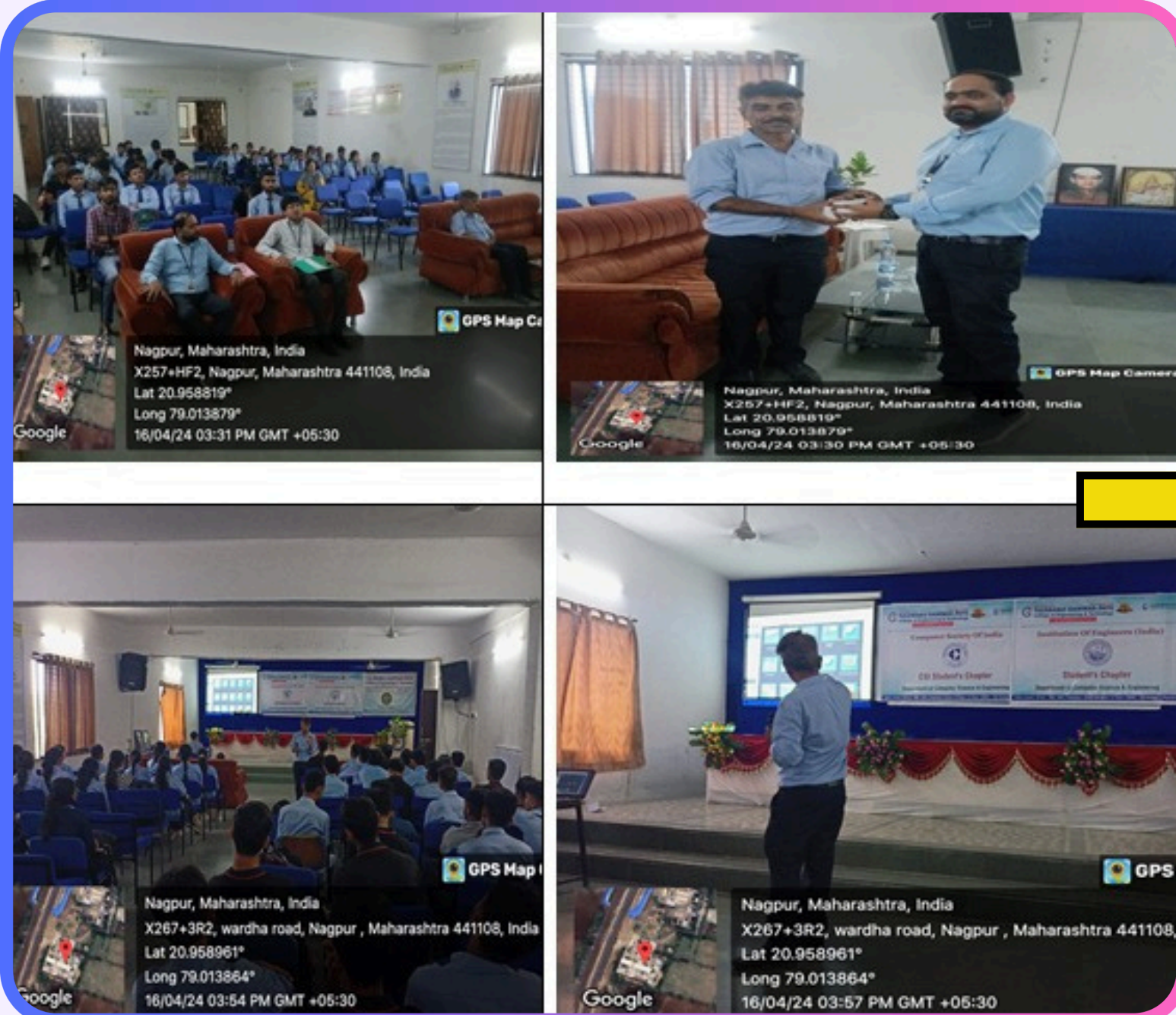
**Prof. Jayant Adhikari**



**Prof. Anita Yadav**



## Guest Lecture on “Computer Network and NS2 Software’s”



The CSE Department of TGPCET College organized a guest lecture on April 16, 2024, inviting Mr. Raj Arora, Director of Revat Network Nagpur, to enlighten students on the topic of "Computer Networks and NS2 Software." The event was conducted under the auspices of the ISTE and CSI Students Chapter, attracting a total of 75 students eager to delve into the intricacies of networking and simulation technology.

## Guest Lecture “Selenium and Rust Technologies”

**On Date 15 FEBRUARY 2024**

The program was introduced as a guest lecture featuring Mr. Mayur Kirtane, a seasoned professional with over 10 years of experience in the IT industry. Mr. Kirtane's expertise in Selenium and Rust technologies made him the perfect candidate to shed light on the integration of these technologies and their significance in the field of software development. Total 114 students was present in the session.





## Guest Lecture on “Generative AI”

**On Date 30 APRIL 2024**

The Department of Computer Science and Engineering successfully organized a guest lecture on Generative AI. Mr. Aniruddha Kalbande, the esteemed Founder of Fireblazer Pvt. Ltd., was invited to share his expertise with the students. The lecture aimed to bridge the gap between theoretical knowledge and practical applications in the field of artificial intelligence.

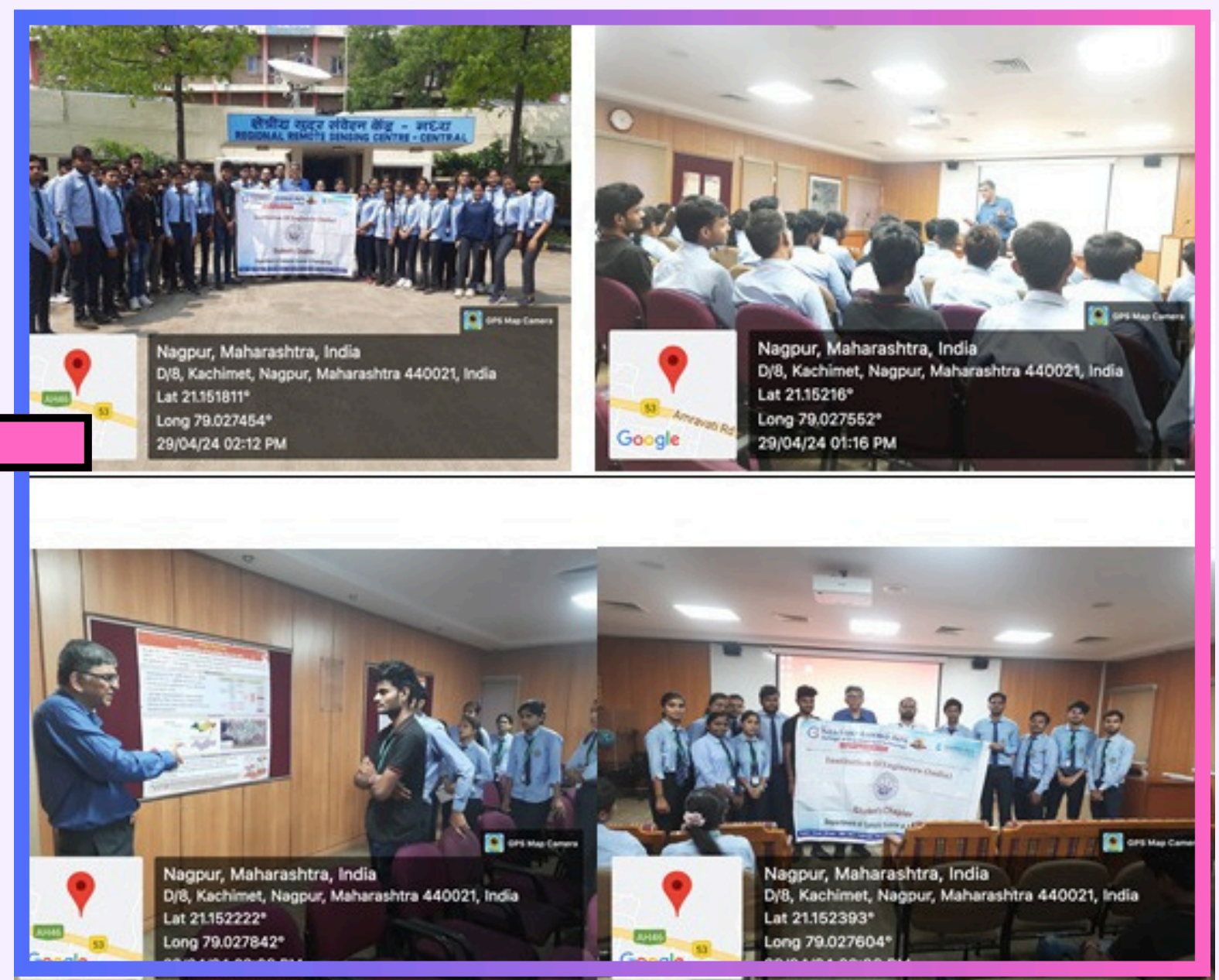


## Industrial Visit at “Regional Remote Sensing Center-Central,Nagpur

**On Date 29 APRIL 2024**

The industrial visit organized by the Department of Computer Science and Engineering at Tulsiramji Gaikwad-Patil College of Engineering aims to bridge the gap between theoretical knowledge and real-world applications in the field of remote sensing.

2nd Year Student Section A





# Industrial Visit at “Regional Remote Sensing Center- Central,Nagpur Nagpur”. Applications”



**On Date 30 APRIL 2024**

The industrial visit organized by the Department of Computer Science and Engineering at Tulsiramji Gaikwad-Patil College of Engineering aims to bridge the gap between theoretical knowledge and real-world applications in the field of remote sensing.

2nd Year Student Section B

## Two Days Workshop on “Python For AI”

**• Day 1: On Date 29 APRIL 2024**

- Introduction to Python: History, applications, and importance.
  - Setting up Python environment: Installation and IDE setup.
- Basic Python commands and fundamentals: Syntax, variables, data types, operators, and control structures.
- Hands-on exercises: Writing and executing basic Python programs.
- Miniature game building: Overview of game development, creating a simple text-based game, implementing game logic, user input, decision making, testing, and debugging.



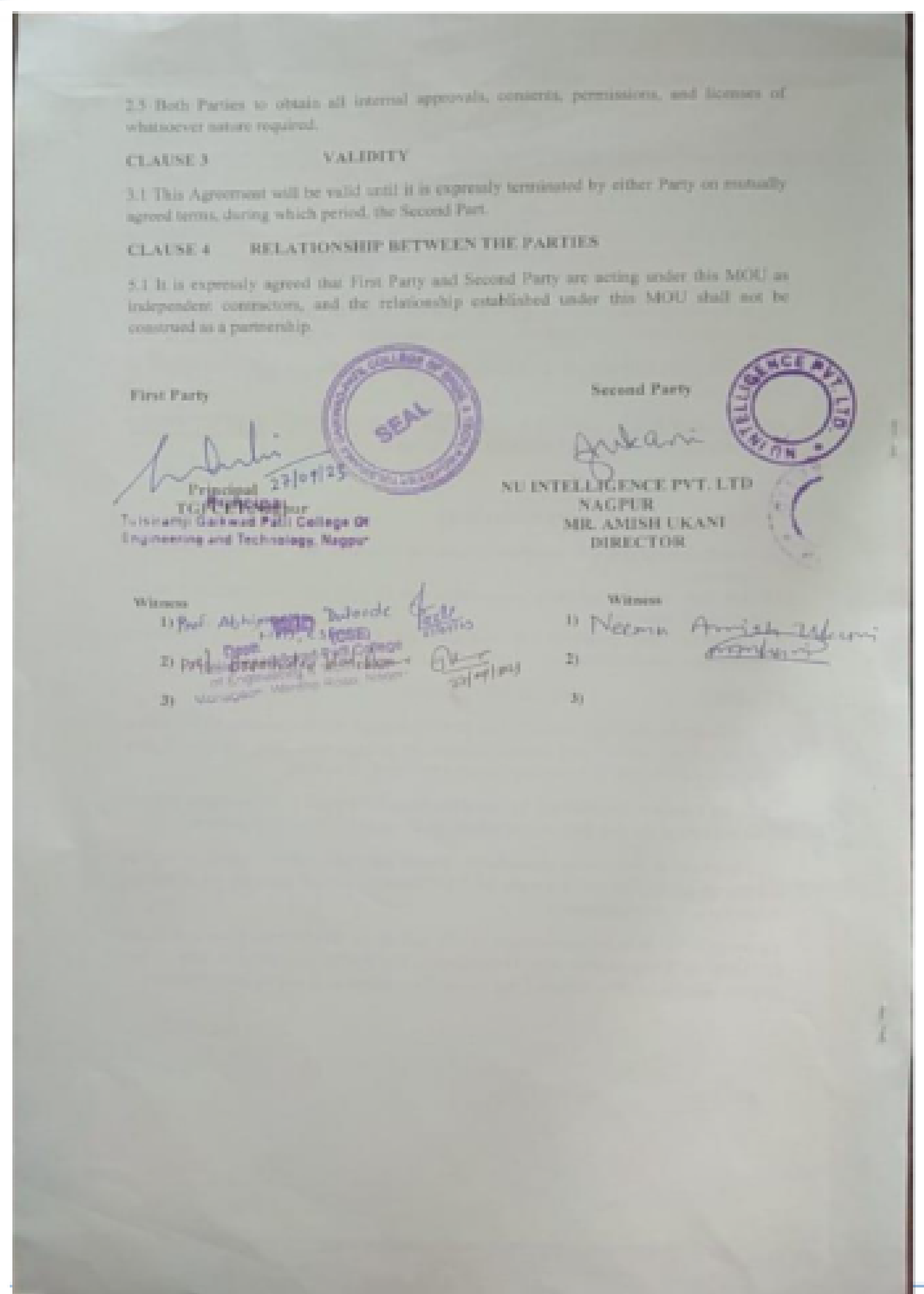
**Day 1**



- **Day 2: On Date 30 APRIL 2024**
- Introduction to Artificial Intelligence: Definition, history, types, applications, and importance.
- Creating AI voice assistants: Understanding Natural Language Processing (NLP), Text-to-Speech (TTS), and Speech-to-Text (STT) technologies.
- Building a simple voice assistant using Python: Integrating TTS and STT libraries, implementing basic commands and responses, testing, and refining.

## Day 2

## MOU SIGNED WITH NU INTELLIGENCE PVT. LTD





# Paper Publication

Sr. no.	Name of Authors	Title of paper	Name of Journal	Volume No	Issue No	Publication Year	ISSN/I SBN No
1	Shivali Tiwari shivalitiwari9@gmail.com  Aditya Lavhale aditya.cse@tgpcet.com  Jayant Adhikari jayant.cse@tgpcet.com  Abhimanyu Dutonde abhimanyudutonde@gmail.com	<b>Improving the Efficiency of Video Object Detection &amp; Classification using BiLSTM with Recurrent Graph Convolutional Neural Networks</b>	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May-24	0971-3034
2	Pragati Patil viceprincipal@tgpcet.com  Abhimanyu Dutonde abhimanyudutonde@gmail.com  Heena Bharat Kachhela hecna.kachhela@gmail.com  Bramhadeo Wadibhasme bramhadeo.cse@tgpcet.com	<b>Design and Implementation of Safety Robot System based on Controller</b>	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May-24	0971-3034
3	Abhimanyu Dutonde abhimanyudutonde@gmail.com  Shubhkirti Salode shubhkirtibodkhe@gmail.com  Jayant Adhikari jayant.cse@tgpcet.com  Aditya Lavhale adityalavhale@gmail.com	<b>Review on Environment Monitoring System with AI/ML Review Paper</b>	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May-24	0971-3034
4	Jayant Adhikari jayant.cse@tgpcet.com  Dhanshri Badole dhanshribadole1999@gmail.com  Pragati Patil viceprincipal@tgpcet.com  Bramhadeo Wadibhasme bramhadeo.cse@tgpcet.com	<b>Detection &amp; Analysis for Limitations of Ethernet Cable Connecting Multiple Computer Devices Inseries</b>	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May-24	0971-3034

5	Pragati Patil viceprincipal@tgpcet.com  Prajakta Helonde prajaktahelonde1397@gmail.com  Bramhadeo Wadibhasme bramhadeo.cse@tgpcet.com  Abhimanyu Dutonde abhimanyudutonde@gmail.com	<b>Advanced  Firefighting and  Alert System  Innovation</b>	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May- 24	0971- 3034
6	Pragati Patil, Abhimanyu Dutonde, Trishali Dhote, Aditya Lavhale	Enhancing Data Analysis Efficiency: A DBSCAN- Apriori Fusion in Map Reduce	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May- 24	0971- 3034
7	Abhimanyu Dutonde, Pragati Patil, Suraj Pawar, Ashwini Mahajan	Design of an Efficient Spiking Neural Networks based Proof of Transaction (PoT) Consensus for Improving Security of Banking Transactions	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May- 24	0971- 3034
8	Abhimanyu Dutonde, Pragati Patil, Monali Raut, Bramhadeo Wadibhasme	Enabling Seamless Interaction: A CNN-OpenCV Fusion Approach to Real-time Hand Gesture Recognition	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May- 24	0971- 3034



# Topper's List

## TOPPERS OF 3RD YEAR AUTONOMUS:

Ranks	Name of Student	Marks Out of 700	Percentage/ SGPA
1	Saurabh Tembhurne	624	9.33
2	Anushka Kamble	629	9.24
3	Pranab Mondal	624	9.19
	Saloni Sontakke	629	

## TOPPERS OF 2ND YEAR AUTONOMUS:

Rank s	Name of Student	Marks Out of 700	Percentage/ SGPA
1	Rupesh Mutkule	639	9.79
2	Shejal Burele	635	9.75
3	Sheetan Khamankar	629	9.71

**TOPPERS OF 1ST YEAR AUTONOMUS SECTION A:**

<b>Ranks</b>	<b>Name of Student</b>	<b>Marks Out of 650</b>	<b>Percentage/ SGPA</b>
1	Astha Nikhare	573	8.8
2	Harshal Waghmare	568	8.7
3	Bhoomi Bodele	566	8.5

**TOPPERS OF 1ST YEAR AUTONOMUS SECTION B:**

<b>Ranks</b>	<b>Name of Student</b>	<b>Marks Out of 650</b>	<b>Percentage/ SGPA</b>
1	Sanjana Paul	579	8.9
2	Yamini Bhese	571	8.7
3	Preet Gawali	569	8.5



# Faculty Awards









# Certificate



## NPTEL-AICTE Faculty Development Programme

(Funded by the MoE, Govt. of India)



This certificate is awarded to

for successfully completing the course  
**ASHWINI MHAJAN**

with a consolidated score of %  
**Social Networks**



(Jan-Apr 2024)

12 Weeks

Prof. Anil Kumar  
NPTEL Coordinator  
IIT Madras

Roll No:

Duration of NPTEL course :



The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.  
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 16<sup>th</sup> Nov, 2023, similar to other refresher / orientation courses.  
F.No. AICTE / RIFD / FDP through MOOCs / 2023



# PLACEMENTS



**Mr. Varis Rana**

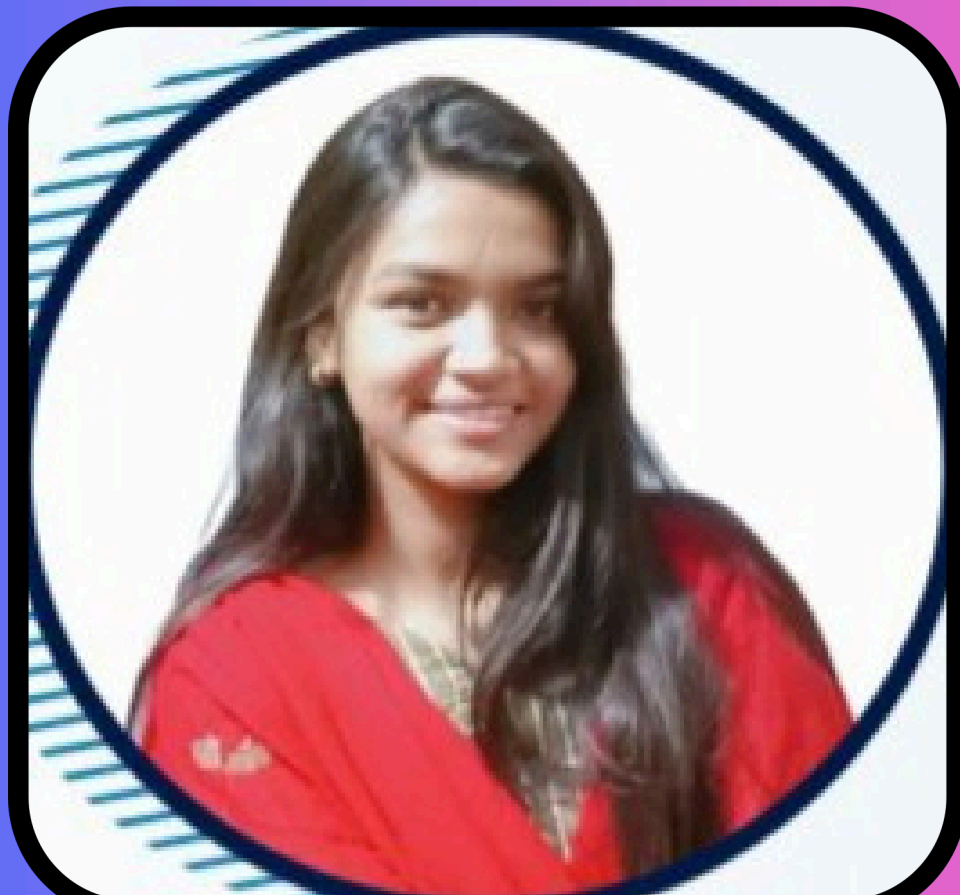
Computer Science & Engineering

**Selected In:**

parchaa

**Package:**

11 LPA



**Ms. Fareen Ansari**

Computer Science & Engineering

**Selected In:**



Corizo Edutech, Bangaluru

**Package:**

6.25 LPA



**Mr. Novhel Rahangdale**

Computer Science & Engineering

**Selected In:**



Acmegrade Pvt. Ltd. Bangaluru

**Package:**

6 LPA



# Student Awards







## Faculty development prog organised at TGPCET

The Department of Computer Science and Engineering and Data Science Engineering at TGPCET, Nagpur, organised an ISTE Self-Sponsored One Week Faculty Development Programme (FDP) on "Multifaceted Nature of Artificial Intelligence" recently. The on-line event, inaugurated by chief guest Dr Suresh Shan and other esteemed dignitaries, featured expert sessions by renowned professionals like Dr Tausif Diwan, Dr Aatul Wadegaonkar and

Bastin Robins.

Supported by the college management, including chairman Dr Mohan Gaikwad-Patil and principal Dr PL Naktode, the programme was successfully coordinated by Prof. Abhimanyu Dutonde and Dr Prashant Thakare. The valedictory function highlighted AI's transformative potential and participants lauded the sessions for their practical applicability in research and teaching.

Nagpur First  
Page No. 3 Jun 17, 2024  
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## जेनेरेटिव एआई पर गेस्ट लेक्चर

सिटी भास्कर | नागपुर. कंप्यूटर साइंस और इंजीनियरिंग विभाग, तुलसीरामजी गायकवाड-पाटील कॉलेज ऑफ इंजीनियरिंग एंड टेक्नोलॉजी ने आईएसटीई और सीएसआई स्टूडेंट चैप्टर के तहत जेनेरेटिव एआई पर एक महत्वपूर्ण गेस्ट लेक्चर का आयोजन किया। विशेषज्ञ अनिरुद्ध कालबंदे ने कार्यक्रम का उद्देश्य बताते हुए कहा कि छात्रों को उभरते डेटा परिदृश्य के लिए कौशल से लैस करना है।

छात्रों ने जेनेरेटिव एआई सिद्धांतों, छवि निर्माण, टेक्स्ट सिंथेसिस एंड नेचुरल लैंग्वेज प्रोसेसिंग जैसे एप्लिकेशन्स की एक विस्तृत शृंखला के बारे में जानकारी हासिल की। यह पहल शिक्षा जगत और उद्योग के बीच सहयोग को बढ़ावा देने के लिए कॉलेज के समर्पण को रेखांकित करती है। कंप्यूटर साइंस एवं इंजीनियरिंग विभाग के अध्यक्ष प्रो. अभिमन्यु दुतोंडे एवं अन्य प्रोफेसर इस दौरान उपस्थित थे।



## गायकवाड पाटील अभियांत्रिकी महाविद्यालयात फेस्टिवल दिवस उत्साहात...



विदर्भ कल्याण / देवेन्द्र सिरसाट

हिंगणा : तुळशीरामजी गायकवाड-पाटील अभियांत्रिकी आणि तंत्रज्ञान महाविद्यालयातील संगणक विज्ञान आणि अभियांत्रिकी विभागाने अंतिम वर्षाच्या विद्यार्थ्यांचा निरोप समारंभ नुकताच साजरा करण्यात आला. या समारंभाचे आयोजन तृतीय वर्षाच्या विद्यार्थ्यांनी केले होते हा कार्यक्रम यशस्वी रित्या पार पडला.

कार्यक्रमाच्या दिवसी विद्यार्थी आणि शिक्षकवृंद एकत्र येऊन उत्सवाची सुरुवात उत्साहवर्धक डीजे संगीताने झाली, त्यानंतर प्रतिभावान विद्यार्थ्यांचे नृत्य, संगीत आणि विविध सांस्कृतिक सादरीकरणे झाले. सर्व उपस्थितांसाठी

भोजनाची व्यवस्था केली होती. या कार्यक्रमाचे वैशिष्ट्य म्हणजे सत्कार समारंभ, जेथे विभागप्रमुख आणि प्राध्यापक सदस्यांनी अंतिम वर्षाच्या विद्यार्थ्यांना स्मृतिचिन्ह देऊन गौरविले. प्राध्यापकांनी पदवीधरांच्या भविष्यातील प्रयत्नांसाठी शुभेच्छा दिल्या. डॉ. मोहन गायकवाड पाटील, आकाश गायकवाड पाटील, डॉ. संदीप गायकवाड, प्राचार्य डॉ. पी.एल. नाकतोडे, उपप्राचार्य डॉ. प्रगती पाटील, यांचे विशेष आभार सी.एस.ई विभागाचे प्रमुख प्रा. अभिमन्यू दुतोंडे यांनी मानले. या समारंभाचा यशस्वितेसाठी प्रा.ब्रह्मदेव वाडीभस्मे, आदित्य लव्हाळे यांचासह सर्व विभागीय प्राध्यापकांनी सहकार्य केले.



## गायकवाड कॉलेज येथे व्याख्यान

नागपूर : गायकवाड पाटील कॉलेज ऑफ इंजिनीअरिंग अँड टेक्नॉलॉजीच्यावतीने कम्प्युटर नेटवर्क्स आणि एनएस २ सॉफ्टवेअरवर व्याख्यान आयोजित केले होते. राज अरोरा यांनी या विषयावर मार्गदर्शन केले. आयएसटीई आणि सीएसआय स्टूडेंट्स चॅप्टरअंतर्गत आयोजित या कार्यक्रमात द्वितीय आणि तृतीय वर्षाच्या विद्यार्थ्यांनी सहभाग घेतला. अरोरा यांनी या विषयाचे विविध पैलू उलगडले आणि विद्यार्थ्यांच्या प्रश्नांना उत्तर दिले. यावेळी, प्राध्यापक आणि विद्यार्थी उपस्थित होते.

## देशोन्नती

## कॉम्प्युटर सोसायटी ऑफ इंडिया विद्यार्थी अध्याय उद्घाटित

गुमगाव ■ तुळशीरामजी गायकवाड-पाटील अभियांत्रिकी आणि तंत्रज्ञान महाविद्यालयात संगणक विज्ञान आणि अभियांत्रिकी विभागाच्या सीएसआय विद्यार्थी अध्यायाचे 'उद्घाटन' प्रमुख पाहुणे सीएसआय विद्यार्थी चेंबर (मुंबई) अध्यक्ष डॉ. सुरेश शान यांच्या हस्ते करण्यात आले. आणि 'दाम्बुलस फोरम' पुन्हा स्थापना करण्यात आली.

यावेळी विद्यार्थी पदाधिकार्यांना वीथ वॉश, ए-२०२३ कॉलेज टॉपरचा सत्कार करण्यात आला. जीपीसी अध्यक्ष डॉ. मोहन गायकवाड-पाटील



यांच्या हस्ते वीथ वॉश व जीपीसीआयचे उपाध्यक्ष आकाश गायकवाड-पाटील, खविनदार डॉ. सविन गायकवाड यांनी औपचारिक उद्घाटन करून दिले. प्राचार्य

टीजीपीसीईटी, डॉ. पी.एल. नाकतोडे व उपप्राचार्य प्रा. प्रगती पाटील, सीएसई एचलोडी प्रोफेसर अभिमन्यू दुतोंडे यांनी सक्रिय सहभागाने प्रतिष्ठा वाढवली. (वार्ताहर)