



**Sardar Vallabhbhai National Institute of Technology,
Surat - 395007**

NEWSLETTER

Issue-2 July-2025

DEPARTMENT OF ARTIFICIAL INTELLIGENCE,
Sardar Vallabhbhai National Institute of Technology,
Ichchhanath, Surat - 395007



This Issue covers

- ❑ Vision
- ❑ Mission
- ❑ Message from HOD
- ❑ Academic Programmes
- ❑ Our Faculty Members
- ❑ Publications
- ❑ Faculty Achievements
- ❑ Student Achievements
- ❑ International Mother language day
- ❑ नशा मुक्ति Abhiyan
- ❑ Vigilance Awareness Week 2024
- ❑ Expert Talks
- ❑ STTPs
- ❑ Achievements of the Department
- ❑ Newsletter Committee

VISION

Our vision is to play a pivotal role in excelling academic and research outcomes in Artificial Intelligence amalgamating interdisciplinary areas of science, engineering, and humanities.

MISSION

- To be a hub of Artificial Intelligence research in all directions: theoretical research , translation research, and meeting the needs of IT industries.
- To transform the knowledge of AI in product development that meets human life easier.
- To become a globally renowned venue for AI education and technology development and commercialization.
- The department is also trying to align the initiatives taken by the Government where Artificial intelligence can play a key role in achieving those milestones like applications of AI in renewable energy, AI in electric vehicle ,AI- based education/learning, AI in smart city development.
- Surat is the center of textile and diamond cutting industries. The department is also exploring challenges and the AI-based solutions for those industries.

MESSAGE FROM HOD

Welcome to the Artificial Intelligence Department at SVNIT!

Whether you're considering joining our academic program or simply interested in learning more about our research initiatives, we're thrilled to have you explore the exciting world of AI with us. As the Head of the Artificial Intelligence Department, I am honored to lead a team of passionate researchers, engineers, and scholars who are dedicated to advancing the frontiers of a transformative era where data and intelligence converge to shape the future. Our department is committed to fostering a dynamic and inclusive environment where creativity, innovation, and collaboration thrive. Currently, Artificial Intelligence Department offers B.Tech, and Ph.D. programmes. Our curriculum is designed to nurture the next generation of engineers and researchers, equipping them with the knowledge and skills needed to tackle the challenges of data science and artificial intelligence.

From developing AI-driven solutions for healthcare, finance, and sustainability to exploring the ethical and societal implications of AI technologies, our research spans a wide spectrum of disciplines and applications. We welcome collaborations with industry partners, fellow academics, and policymakers to address some of the most pressing challenges facing society today.

MESSAGE FROM HOD

For prospective students, I invite you to embark on a journey of discovery and growth with us. Our rigorous academic programs provide a solid foundation in AI theory, coupled with hands-on experience through cutting-edge research projects and industry collaborations. Whether your interests lie in machine learning, natural language processing, computer vision, robotics, or any other AI-related field, you'll find ample opportunities to explore your passions and make meaningful contributions to the field.



Dr. Tanmoy Hazra

Assistant Professor & Head
Department of Artificial Intelligence
Email: hod@aid.svnit.ac.in

ACADEMIC PROGRAMMES

- **B.Tech in Artificial Intelligence**
B.Tech 2nd year Strength - 134 Students
B.Tech 3rd year Strength - 129 Students
- **Integrated Postgraduate in Artificial Intelligence**
IPG 2nd year Strength - 30 students
- **Doctor of Philosophy in Artificial Intelligence**
Ph.D. Strength - 15 students

OUR FACULTY MEMBERS



Dr. Rahul Dixit

Assistant Professor

Research Area: Machine learning, Computer Vision, Digital Image Processing, Document Authentication, Medical Image Authentication, Signature Authentication, Digital Image and Video Forensics, Information Retrieval, Natural Language Processing.



Dr. Tanmoy Hazra

Assistant Professor

Research Area: Machine Learning, Deep Learning, Applications of Game Theory

OUR FACULTY MEMBERS



Dr. Nitesh A. Funde

Assistant Professor

Research Area: Data Science, Machine Learning, Classical Optimization Techniques, Smart Grids, Sustainable Cities, Cyber-Physical Systems



Dr. Praveen Kumar Chandaliya

Assistant Professor

Research Area: Biometrics, Face Recognition, Medical Imaging, Computer Vision, Generative AI

OUR FACULTY MEMBERS



Dr. Pruthwik Mishra

Assistant

Professor

Research Area: Natural Language Processing, Word Problem Solving, Computational Linguistics, Machine Translation, Summarization, Large Language Models, Speech to Speech Machine Translation, Machine Learning, Deep Learning, Hate Speech Detection, Natural Language Understanding, Shallow Parsing, Dependency Parsing, Sentiment Analysis, Tool Development for Indian Languages



Dr. Rohit Kumar

Assistant

Professor

Research Area: Optimization Techniques, Approximation Algorithms, Intelligent Transportation Systems, Wireless Sensor Networks

OUR FACULTY MEMBERS



Dr. Rahul Shrivastava

Assistant

Professor

Research Area: Recommender System, Multi-Stakeholder, Multi-Criteria and Multi-Objective Personalized Recommendation System, Machine Learning

PUBLICATIONS

❑ Journal:

- Arun, Anupama, Sanjeev Sharma, Bhupendra Singh, and Tanmoy Hazra. "Identification of Plant Species Using Convolutional Neural Network with Transfer Learning." *Journal of Phytopathology* 173, no. 1 (2025): e70032.
- Panchananam, Srinivas Lakshmi, Praveen Kumar Chandaliya, Zahid Akhtar, Kishor Upla, and Raghavendra Ramachandra. "Wavelet Fusion: Enhancing Plant Leaf Disease Classification with Multi-Scale Feature Extraction and Explainable AI." *Expert Systems with Applications* (2025): 127947.
- Cheniti, Mohamed, Zahid Akhtar, and Praveen Kumar Chandaliya. "Dual-Model Synergy for Fingerprint Spoof Detection Using VGG16 and ResNet50." *Journal of Imaging* 11, no. 2 (2025): 42.
- Mujadia, Vandan, Pruthwik Mishra, and Dipti Misra Sharma. "Disfluency annotated corpora for Indian English in technical domains." *Language Resources and Evaluation* (2024): 1-32.
- Mujadia, Vandan, Pruthwik Mishra, and Dipti Misra Sharma. "Disfluency processing for cascaded speech translation involving English and Indian languages." *Language Resources and Evaluation* (2025): 1-34.

PUBLICATIONS

❑ Journal:

- Tiwari, Ritu, Thanga Raj Chelliah, and Venkata Dinavahi. "Detailed Modeling of a Practical 1400MW Hydropower Plant and Real-Time Hardware Emulation For Governor Tuning Application." IEEE Transactions on Industry Applications (2024).
- Khong, J., A. Munro, Y. Wang, R. Tiwari, L. Robinson, A. France, S. Pan, N. Thorp, E. Smith, and G. Whitfield. "Tumour and Dosimetric Parameters Associated with Radionecrosis in Ependymoma Treated with Proton Beam Therapy." International Journal of Radiation Oncology, Biology, Physics 121, no. 3 (2025): e3.
- Verma, Shivam, Ritu Tiwari, Narsingh Verma, Shraddha Singh, and Aakansha Sharma. "Anthropometry and blood biomarkers of diabetes and their possible association with obesity and metabolic syndrome." Journal of Diabetes & Metabolic Disorders 23, no. 1 (2024): 509-517.
- Tiwari, Ritu, Shivam Verma, Narsingh Verma, Shraddha Singh, Ajay Verma, Anupam Mittal, Shiraja Haque, and Toyaj Kumar. "Newer insights of H1N1: Swine Flu Virus." Indian Journal of Community Health 36, no. 1 (2024): 22-25.

PUBLICATIONS

❑ Journal:

- Tiwari, Ritu, Shivam Verma, Narsingh Verma, Dileep Verma, and Jagdish Narayan. "Correlation of Serum Uric Acid Levels with Certain Anthropometric Parameters in Prediabetic and Drug-naive Diabetic Subjects." *Annals of African Medicine* 23, no. 1 (2024): 13-18.
- Tandukar, R., R. Tiwari, A. Singh, G. Bhattarai, and L. Chaudhary. "Social Media Use and Its Association With Academic Performance Among School Students of Kirtipur Municipality, Kathmandu, Nepal." *J Comm Med and Pub Health Rep* 5 (2024): 12.
- Malviya, Anjali, Rahul Dixit, Anupam Shukla, and Nagendra Kushwaha. "A Novel Approach to Detection of COVID-19 and Other Respiratory Diseases Using Autoencoder and LSTM." *SN Computer Science* 6, no. 1 (2025): 1-11.

PUBLICATIONS

❑ Conference:

- Todmal, Shantanu, and Tanmoy Hazra. "Text Guided Image Manipulation using LiT and StyleGAN2." 2024 IEEE 3rd International Conference on Computing and Machine Intelligence (ICMI). IEEE, 2024.
- Towards Explainable Ethnicity Altered Synthetic Images, Jashn Jain, Praveen Kumar Chandaliya, Tanmoy Hazra, Kishor P. Upla, Zahid Akhtar, Fifth International Conference on Innovations in Computational Intelligence and Computer Vision, June 04-06, 2025 | CNR NANOTEC, at the University of Calabria, Italy (Accepted)
- D S Panda, Ch. Reshma, Rahul Dixit, "A Robust Intelligent License Plate Recognition System for Vehicle Surveillance and Security Control", International Conference on Communication, Security, and Artificial Intelligence IEEE ICCSAI 2025. Galgotias University, Greater Noida, India. (Accepted)
- Rahul Dixit, Arth Agrawal, Anuja Dixit, Sweta Tripathi "Detection of Text-to-Speech and Voice Conversion Attacks Using CNN-BiLSTM Hybrid Networks", International Conference on Signal Processing, Computing and Control, ISPCC2025. Jaypee University of Information Technology (JUIT), (H.P.), Shimla (Accepted)

PUBLICATIONS

❑ Conference:

- Arvind Singh Rajpoot, Rahul Dixit and Anupam Shukla,” An Ensemble Multi-CNN Framework for Enhanced Skin Cancer Classification”, ”, International Conference on Signal Processing, Computing and Control, ISPCC2025. Jaypee University of Information Technology (JUIT), (H.P.), Shimla (Accepted)
- P. K. Chandaliya, K. Raja, H. Zhang, R. Ramachandra and C. Busch, "Synthetic Ethnicity Alteration for Diversifying Face Datasets - Investigating Recognition and Quality," 2024 IEEE International Workshop on Information Forensics and Security (WIFS), Rome, Italy, 2024, pp. 1-6, doi: 10.1109/WIFS61860.2024.10810684.
- Priyanka Dasari, Mupparapu Sohan Gupta, Nagaraju Vuppala, Pruthwik Mishra, Parameswari Krishnamurthy, Sandhi Splitting in Tamil and Telugu: A Sequence-to-Sequence Approach Leveraging Transformer Models, Proceedings of the First Workshop on Challenges in Processing South Asian Languages (CHiPSAL 2025).

PUBLICATIONS

❑ Conference:

- Jain, Ekta, Syed Faisal Ahmed, Kshitij Yugbodh, Ritu Tiwari, Yogesh Agrawal, Neelam Muchrikar, and Vikas Shende. "A DFT study on phase transition, electronic structure, optical and electronic properties of PbTe." In AIP Conference Proceedings, vol. 3149, no. 1. AIP Publishing, 2024
- Pavone, Mario F., Mukesh Saraswat, and Ritu Tiwari, eds. Proceedings of International Conference on Computational Intelligence: ICCI 2022. Springer Verlag, Singapore, 2024.
- Singh, Shashi Pal, Ritu Tiwari, and Sanjeev Sharma. "Comparative Analysis of algorithm for big data classification." (2024).
- Mukund K Roy, Karunesh K Arora, Praveen Kumar Chandaliya, Rohit Kumar, Pruthwik Mishra, "CDAC-SVNIT submission for IWSLT 2025 Indic track shared task", 22nd International Conference on Spoken Language Translation (IWSLT) Conference, 31st July 2025, Vienna, Austria, (Accepted)

PUBLICATIONS

❑ **Book:**

- T. Hazra, K. Anjaria, A. Bajpai and A. Kumari, Applications of game theory in deep learning, 1st Edition, Springer Cham, 2024

❑ **Book Chapter:**

- P. Nelapati, N. Funde , A. Viswanadapalli, K. Jain and M. Dhabu. (2024). Security Enhancement of Smart Grids Using Blockchain Technology. In Data Management and Security in Blockchain Systems, Bentham Science.

FACULTY ACHIEVEMENTS



Dr. Tanmoy Hazra

1. **Appointed as a project evaluator by Czech Science Foundation (a public funding agency in the Czech Republic), 2024.**
2. **Track Chair, ICMC-2025, Computational Intelligence track, Organized by IIT Bhilai**
3. **Track Chair, ISAI-2025, Organized by NIT Sikkim**



Dr. Rahul Dixit

- 1- **Session chair, ICETICT 2024**
- 2- **Organizing Secretary – RTES 2025**
- 3- **Track Chair, ICCI 2024**

FACULTY ACHIEVEMENTS



Dr. Nitesh Funde

1. **Track Chair, ICCI 2024, SVNIT Surat**
2. **Track Chair, NGNDAI 2025, MNNIT Prayagraj**
3. **Associate Editor, Curues Journal of Computer Science**
4. **Editorial Board Member, Scientific Reports**
5. **Organizing Secretary, ICCI 2024**



Dr. Praveen Chandiliya

Project: Indo-Norwegian collaborative research project INCP2-2024/10365 CapsTrain – Making Wireless Capsule Endoscopy Clinic Ready: Training and Educating Next Generation Researchers

FACULTY ACHIEVEMENTS



Dr. Pruthwik Mishra

1. **Track Chair - ICAIET 2025, XIM University**
2. **Track Chair - ICCI 2024, NIT Surat**
3. **Workshop Organizer - GlobalNLP 2025, RANLP 2025 Conference**
(<https://ranlp.org/ranlp2025/index.php/workshops/>; <https://globalnlp2025.github.io/>)



Dr. Rohit Kumar

Track Chair, ICCI 2024, Organized by NIT Surat



Dr. Rahul Shrivastava

Member of the Technical Program Committee at the 13th IEEE International Conference on Intelligent Systems and Embedded Design (ISED-2025) organized by NIT Raipur

STUDENT ACHIEVEMENTS

Technical Events:

| NAME | ACHIEVEMENT |
|-------------------------------------------------------|--------------------------------------|
| 1. Driti Rathod 2. Jeet Gupta 3. Akshat Agarwal | Siphon - Aahat, 1 st Rank |
| 1. Devang vala 2. Utkarsh Pandey | CEV Escapify , 1 st Rank |

STUDENT ACHIEVEMENTS

Technical Events:

| NAME | ACHIEVEMENT |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 1. Kanada Param Rasilal | LEGO startup event-The team made a “STUDENT'W APP” for startup. Won the competition by securing 4th position out of 80 teams. |
| 1. Sanapala Sanjay, 2. Jakka Komal Sai 3. Paida Raja Ratan | SIPHON - SQUIUDATHON, Institue level, 1st Position |



STUDENT ACHIEVEMENTS

Technical Events:

| NAME | ACHIEVEMENT |
|---------------------------------------------------------------------------------|------------------------------------------------------------------------|
| 1. Kanada Param Rasilal 2. Gaurav | Odoo Mindbend hackathon. Selected for final round of 24 hour hackathon |
| 1. Hitarth Shah 2. Harshvardhan Gupta 3. Kuruv Patel 4. Utkarsh Pandey | Google Winter Of Code |



Department of Artificial Intelligence









Issue-2, July-2025

STUDENT ACHIEVEMENTS


Technical Events:

| NAME | ACHIEVEMENT |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 1. Dushyant Yadav 2. Muzammil Mohammad 3. Harshit Maurya | Codewars, Mindbend, 1st position |
| 1. Deep Das 2. Miten | Statistella - IIT BHU , National Level, Data Analytics Competition - Secured 3rd Runner-up |





A DATA ANALYTICS COMPETITION



Statistella: Data Analytics Competition
Round-2

Your Result

4

Not Shortlisted

mjgandhi2305

Deep Das +1 Player(s)

Rank

4

Overall Result

| Rank | Team Name | Name / Organiz |
|------|--------------------------|-------------------------------------|
| 1 | Team Forward Propagaters | Deepak Ganta Indian Institute of |
| 2 | Beyond Horizon | Sakshi Kumar IIT BHU Varanasi |
| 3 | Data_encoders | Manuj Grover Indian Institute of |

STUDENT ACHIEVEMENTS

Technical Events:

| NAME | ACHIEVEMENT |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Deep Das | <p>Autonomous Drone Development Challenge - ADDC 2025 Secured AIR 2 and 2nd Position in Safe Design Category. Codex Coding Competition, National, 4th position. Research Paper, National, Audio Forgery Detection using ResNet++ and Integrated Attention Mechanisms. IICPC coding contest, National, 1324 AIR, merit holder</p> |



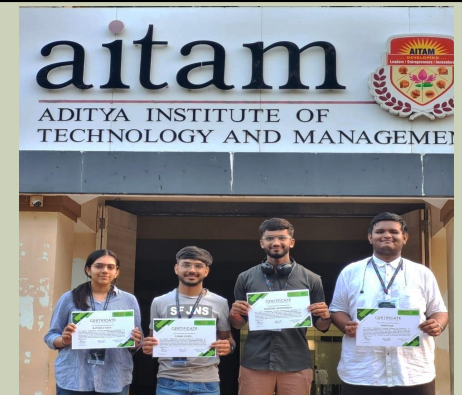
| RANK | NAME | COLLEGE | POINTS |
|------|--------------------|---------|--------|
| 1 | DWEET MODI | SVNIT | 100 |
| 2 | GOPALA KRISHNAN N | CEG | 90 |
| 3 | VIJAY K G | CEG | 80 |
| 4 | DEEP DAS | SVNIT | 70 |
| 5 | ARAVINTH A | MIT | 60 |
| 6 | GOKULNITHI P | KEC | 50 |
| 7 | SANKARA KRISHNAN P | CEG | 40 |
| 8 | VANDIT PATEL | SVNIT | 30 |
| 9 | ABHINAV CHOUKSE | SVNIT | 20 |
| 10 | ANANTHA NARAYANAN | SVNIT | 10 |



STUDENT ACHIEVEMENTS

Technical Events:

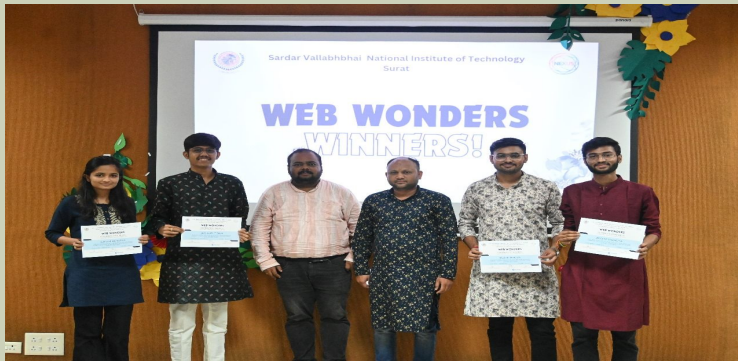
| NAME | ACHIEVEMENT |
|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Harshil Andhariya 2. Deep Das 3. Kavisha Vaja 4. Vansh Patel | National Avishkaar Hackathon Powered by Geeksforgeeks, National Level, 3rd runners up (Rank 4th out of 50+ teams in Grand Finale in last round selected from 1000+ registered teams) This was the 48 hours National level hackathon sponsored and evaluated by GeeksforGeeks Edtech and held at Tekkali, near Vishakhapatnam (Vizag) in Andhrapradesh in Offline mode. |



STUDENT ACHIEVEMENTS

Technical Events:

| NAME | ACHIEVEMENT |
|---------------------------------------------------------------------------------|------------------------------------------------------------------|
| 1. Rudray Dave 2. Smit Deoghare 3. Angela Dutta | 1st place in Google Winter Of Code organized by the GDGC Club |
| 1. Dev Shrut Jain 2. Nilang Bhuva 3. Suhani Acharya 4. Archit Savaliya | Web Wonders, Institute Level, Winner Web-development Competition |



STUDENT ACHIEVEMENTS

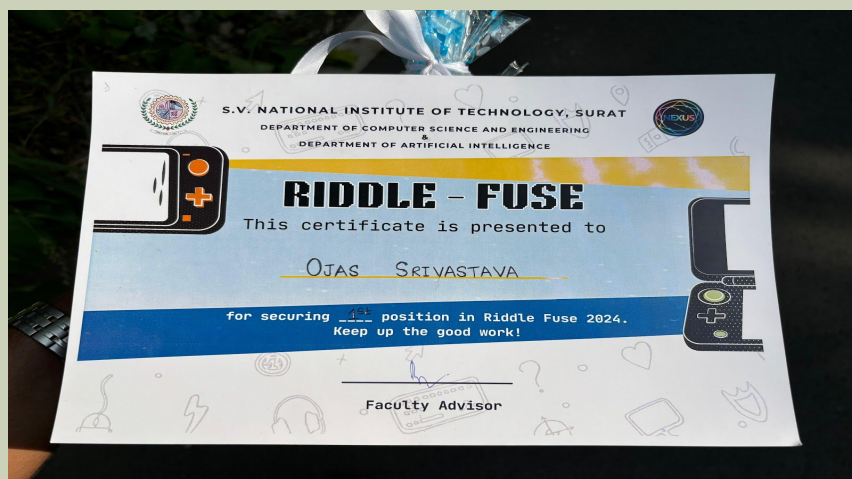
Non-Technical Events:

| NAME | ACHIEVEMENT |
|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none">1. Archit Savaliya2. Kuruv Patel3. Jeet Gupta4. Divyaksh Chachan | Nexus Sturff Football 1 st Rank, Unity Cup football 1st Runner Up , Inter year 1st runner up |
| <ol style="list-style-type: none">1. Aryan Shah2. Harsh Kasundra3. Divyaksh Chachan4. Kanahaiya Chhapparwal | Secured 3 rd Position in the Nexus Riddlefuse |
| <ol style="list-style-type: none">1. Bhavya Usha | Secured 3 rd position in Football (W) in the All India inter NIT tournament 2023-24 organized by NIT Rourkela |

STUDENT ACHIEVEMENTS

Non-Technical Events:

| NAME | ACHIEVEMENT |
|------------------------------------------|-------------------------------------------------------------------|
| 1. Ojas Srivastava 2. Karanbhai Bheda | RiddleFuse, Institute Level Participant Won RiddleFuse 2024-25 |
| 1. Akshaya Balagopal | Kashish 2024, Institute Level, 1st prize |



STUDENT ACHIEVEMENTS

Non-Technical Events:

| NAME | ACHIEVEMENT |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| <ol style="list-style-type: none">1. Akshaya Balagopal2. Sruthi Jayesh3. Shreya Ashar4. Rishit Raghuvanshi | Kashish 2024, Institute Level, 1st prize |
| <ol style="list-style-type: none">1. Akshaya Balagopal2. Sruthi Jayesh | Sparsh 2025, Institute Level , 1st prize |



Department of Artificial Intelligence

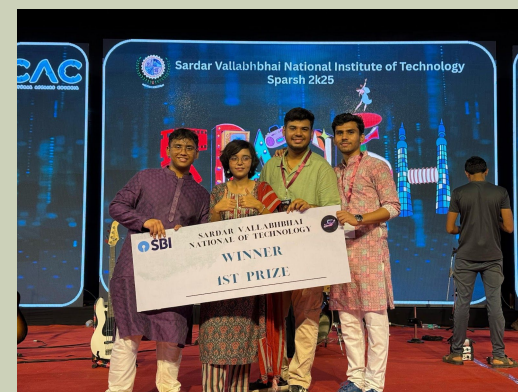


Issue-2, July-2025

STUDENT ACHIEVEMENTS

Non-Technical Events:

| NAME | ACHIEVEMENT |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> 1. Kasha Ashwith 2. Chiluveru Sreeshant 3. N Yashwanth 4. Yarlagadda Sarath Chaitanya | <p>Alchemy 5.0, Institute level ,1st runner-up (2nd place)</p> <p>Team name - Quiz Quills</p> |
| <ol style="list-style-type: none"> 1. Madhireddy Samhitha Reddy | <p>Inter-NIT Kho kho,Institute Level ,1st position</p> |
| <ol style="list-style-type: none"> 1. Kanada Param Rasilal | <p>Sparsh (cultural fest) Singing nights group category winner.</p> |



STUDENT ACHIEVEMENTS

Non-Technical Events:

| NAME | ACHIEVEMENT |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 1. Archit Savaliya | Achievement in two Dance Competition of our college Runner up in 'JAM ' Winner in 'FlexOFF' |
| 1. Hitarth Shah | Represented NIT Surat at All India Inter-NIT Cricket Tournament held at NIT Silchar 2024 Institute Level of Achievement |



INTERNATIONAL MOTHER LANGUAGE DAY



21st February International Mother Language Day

This day is celebrated all over the world by the United Nations. The purpose of this day is to preserve linguistic diversity and to try to promote mother tongues.

The theme of International Mother Language Day this year is:

"मातृभाषा के माध्यम से प्रतिभा और क्षमता का विकास"।

नशा मुक्ति ABHIYAN

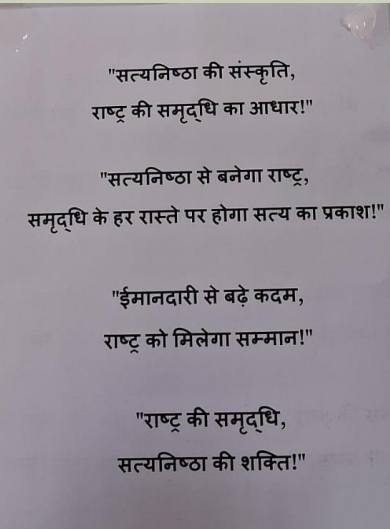


On the Nasha Mukta Bharat Abhiyaan (NMBA) occasion, Hon'ble Minister for Social Justice & Empowerment, Dr. Virendra Kumar, is conducting a mass Pledge against Drug Abuse on **12 August 2024, at 9 AM**. At the same time, lakhs of participants from all the educational institutions, states/districts, and public institutions will be taking the pledge in their respective locations across the country.

The theme for this year's NMBA celebration is:

'Viksit Bharat ka Mantra, Bharat ho Nashe se Swatantra'.

VIGILANCE AWARENESS WEEK 2024



Sardar Vallabhbhai National Institute of Technology, Surat is going to observe “Vigilance Awareness Week 2024. The theme of Vigilance Awareness Week 2024 will be

“भ्रष्टाचार का विरोध करें; राष्ट्र के प्रति समर्पित रहें”/“Say No to Corruption; Commit to the Nation”.

Mass Pledge was taken by 10 employee in physical mode and the slogans were displayed on Notice board of DoAI, SVNIT.

EXPERT TALKS



February 2025
On the Occasion of National Science Day
Padmashree Prof S. Bandopadhyay (Director, ISI Kolkata)
and
Prof. Ujjwal Maulik (Jadav University)
have taken an Interactive session with students, faculty and research scholar

EXPERT TALKS



2nd July 2025

Title: **Speech Technologies for Indian Languages**

Dr. Vipul Arora, Associate Professor,
Department of Electrical Engineering,
IIT Kanpur

STTP- “Ethical AI/ML for Innovation: Exploring Technologies and Applications”

- Dr. Ritu Tiwari, Dr. Nitesh A. Funde, Dr. Rohit Kumar have conducted STTP on Ethical AI/ML for Innovations: Exploring Technologies and Applications from 24/02/2025 to 07/03/2025. Many Students and Faculty have participated in STTP.
- It has covered topics such as Distributed Anomaly Detection using Federated Learning, Generative AI, Group Signature-based Privacy Preservation in Federated Learning, Robotics Applications and many more.



STTP- “Multi-Modal Generative AI”

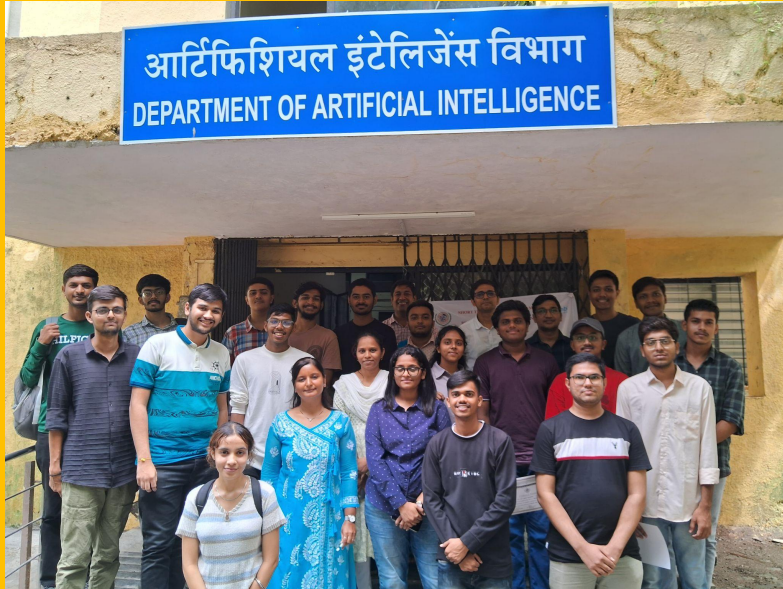
- STTP on “Multi-Modal Generative AI” was conducted by Dr. Pruthwik Mishra, Dr. Rahul Dixit, and Prof. Ritu Tiwari from 16/12/2024 to 25/12/2024. More than 35 people have participated including Students, Faculty and Research Scholars.
- Topics such as Addressing Hallucination in Large Language Models, Privacy Preserved Generative Networks, AI:LLMs and beyond, Foundation Models in NLP, AI & CV for Self Driving Cars, Speech to Speech Machine Translation, Word Problem Solving using LLMs, and many more were covered.
- Speakers from University of Bonn, Institute for Infocomm Research Singapore, TCS Research, IIIT- Hyderabad, and IIT-BBS have been invited for the talk.

STTP- “Machine Learning and Its Applications”



- STTP on “Machine Learning and Its Applications” was conducted by Dr. Tanmoy Hazra, Dr. Praveen Kumar Chandaliya, and Prof. Ritu Tiwari from 02/12/2024 to 13/12/2024. More than 30 people have participated including Students, Faculty and Research Scholars.
- Topics such as Supervised learning, Classification and Regression, Linear Regression, Logistic regression, Advanced topics: GenAI, XAI, LLM, Speech-based Health Analysis and many more were covered.

STTP- “Recent Trends and Practices in AI”



- STTP on “Recent Trends and Practices in AI” was conducted by Dr. Tanmoy Hazra, Dr. Praveen Kumar Chandaliya, Dr. Nitesh Funde and Prof. Ritu Tiwari from 07/07/2025 to 11/07/2025. More than 35 people have participated including Students, Faculty and Research Scholars.
- Topics such as Deep learning, Federated Learning, GAN, Transformer, Explainable AI and many more were covered.

ACHIEVEMENTS OF THE DEPARTMENT

- An MoU has been signed between SVNIT, Surat and L&T Technology Services Ltd. where Dr. Pruthwik Mishra is the coordinator to track the progress of the projects that would be undertaken. Both the parties have agreed to cooperate on research activities for fostering joint research projects in the areas of AI in Plant Engineering or Process Engineering domain, exchange of faculty and students for education and research, sponsorship of symposiums, workshops, technical presentations on request, prospective internship opportunities for students.
- High Performance Lab Cluster setup department of AI and CSE.

HIGH PERFORMANCE GPU LAB

Master Node Configuration:

Processor: 2 x 32 C/64T 3.2G

RAM: 8x 64 GB ECC 4800 MHz DDR5 RDIMM (Total 512GB)

SSD : 2x 1.92 TB SATA 2.5" SSD HDD: 2 x 7.68 TB SATA 2.5

Chassis : 2U Rack Mount

OS: Stable and latest Ubuntu LTS (64 bit)

Rack: 42U server rack with dimensions of 800mm x 1200mm

Power Backup: 20 KVA UPS

GPU Node (Unit 2) Configuration:

Processor: 4 x 64 C/128T 3.1 G

RAM: 24x 96 GB ECC 4800 MHz DDR5 (Total 2304 GB)

Storage: 4x 960 GB SATA 2.5" SSDs

GPU: 2x Nvidia H100 NVL with 94 GB of dedicated high-bandwidth memory, optimized for intensive computational workloads, particularly in AI and Deep Learning & GenAI applications

Network: Dual 10 Gbe Ethernet LAN Ports



Jointly Develop by DoAI and DoCSE

NEWSLETTER COMMITTEE

- ❑ Dr. Praveen Kumar Chandiliya (Assistant Professor)
- ❑ Dr. Aaishwarya Bajaj (Teaching Assistant)
- ❑ Vaidehi Suthar (Teaching Assistant)
- ❑ Jetshree Gandhi (Teaching Assistant)
- ❑ Jalpa Patel (Research Scholar)