



VIGNAN'S
FOUNDATION FOR SCIENCE, TECHNOLOGY & RESEARCH

(Deemed to be University) - Estd. u/s 3 of UGC Act 1956

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Accredited
A+

VU TODAY
A Chronicle of Campus Events

08 to 10 January 2025

Inauguration: A Grand Opening

The FDP commenced on December 16, 2024, with an inauguration ceremony graced by distinguished guests, including Dr. Sanjeev Manhas, Principal Investigator, IIT Roorkee, Prof. B. Nagabhushana, Vice-Chancellor, and Prof. Samarjit Kar, NIT Durgapur. Internal dignitaries such as Prof. N. Srinivasulu, Dean, School of Applied Sciences and Humanities, Prof. N. Sheshagiri Rao, HoD, Department of Mathematics and Statistics, and other faculty members were also present. Dr. Sanjeev Manhas introduced the mission of the EICT Academy and its collaboration with VFSTR.

Day 1: Mathematical Foundations and Challenges in Machine Learning

The program began with comprehensive lectures on the mathematical underpinnings of machine learning, delivered by Prof. Samarjit Kar, Department of Mathematics, NIT Durgapur, on the topic "Machine Learning: Mathematical foundation and challenges". Elaborated on the key concepts such as linear algebra, probability, and optimization, which form the foundation of various



machine learning algorithms. He provided detailed explanations and real-world examples to ensure participants gained a strong grasp of these essential mathematical principles.

The afternoon session, was taken by Dr. Wasiur Rahman Khuda Bukhsh, University of Nottingham, addressed on the title: "Learning systems under extreme sparse regime using propagation of chaos" introduced innovative techniques for tackling challenges in sparse data conditions. Highlighting the concept of the propagation of chaos, He explained how mathematical framework could be applied to model and analyze complex systems. Through engaging discussions and examples, he emphasized the importance of addressing data sparsity for achieving reliable and scalable machine learning solutions.

Day 2: AI in Cyber Security and Mitigating Bias

The second day started with an exploration of AI's pivotal role in addressing cyber security challenges and mitigating biases in

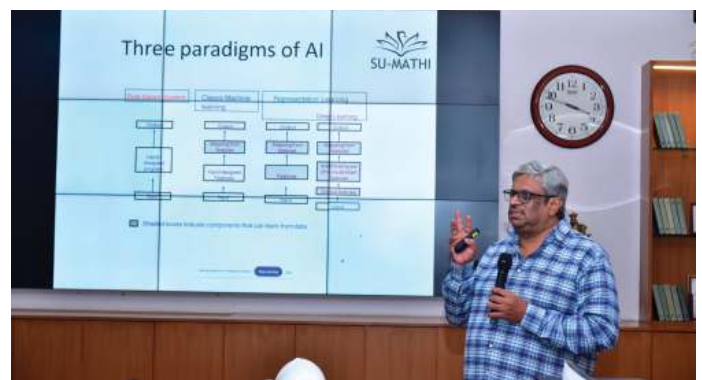
intelligent systems. Prof. Bhuvan Unhelkar, University of South Florida, USA, delivered an insightful session lecture on Machine Learning: Mathematical Foundation & Challenges. The application of AI in cybersecurity, emphasizing real-world case studies like the Capital One data breach is the main idea. He explained how AI-driven systems can detect anomalies, prevent cyber attacks, and respond to threats more efficiently than traditional methods. Participants gained an understanding of how AI tools are transforming cyber security by enabling faster threat detection and more robust defenses against sophisticated cyber adversaries.

In continuation, Dr. Arif Ahmed Sekh's, department of Computer Science, UiT The Arctic University of Norway, addressed on Bias detection and mitigation of AI. And about the critical issue of bias in AI systems, introducing participants to cutting-edge tools such as AI Fairness 360 and Fair learn. He detailed methods for detecting, quantifying, and mitigating biases to ensure equitable outcomes in AI applications. Through interactive discussions and demonstrations, He illustrated how these tools could be integrated into the development pipeline to enhance the fairness and transparency of machine learning models.

The day concluded with a hands-on session led by Dr. Manas Kumar Mohanty, Department of Computer Science and Engineering, SOA university, Odisha. which focused on practical applications of Python in machine learning. Participants engaged in coding exercises to implement machine learning algorithms, gaining valuable insights into developing and deploying AI models for real-world scenarios. This session provided participants with an opportunity to apply their knowledge and bridge the gap between theory and practice.

Day 3: Advances in Deep Learning and Dimensionality Reduction

On the third day, Prof. C.S. Sastry (IIT Hyderabad), Department of Artificial Intelligence (AI), IIT, Hyderabad, delivered an insightful lecture on Dimensionality Reduction Reqniques. He explained methodologies like Principal Component Analysis



(PCA) and t-Distributed Stochastic Neighbor Embedding (t-SNE), highlighting their significance in simplifying high-dimensional data for machine learning applications. His examples demonstrated how these techniques enable efficient data processing and visualization.

Dr. Bikash Santra, School of AI and Data Science, IIT Jodhpur, spoke on Recent advances in Machine Learning. About cutting-edge advancements in machine learning, delving into topics like Generative Adversarial Networks (GANs) and transformers. He provided an in-depth explanation of how GANs are revolutionizing content generation and how transformer models are driving breakthroughs in natural language processing and computer vision. The session emphasized the transformative impact of these technologies on various industries.

Ms. Kopal Rastogi, Research Scholar (IIT Jodhpur), conducted a dynamic hands-on session on Convolutional Neural Networks (CNNs) and transfer learning. Participants gained practical experience in building and fine-tuning image classification models using pre-trained networks. The session equipped attendees with the skills to leverage CNNs for solving complex image recognition problems and adapting models to new datasets efficiently.

Day 4: AI Applications in Healthcare and Semiconductor Modelling



Mr. Suman Pal, Sr. Data Scientist at Oracle Health, delivered an engaging lecture on Recent Trends of AI in the Healthcare Domain, which the transformative role of artificial intelligence in healthcare. He detailed its applications in diagnostics, disease prediction, and personalized treatment planning, showcasing how AI algorithms are revolutionizing medical practices by enhancing accuracy and efficiency. Through real-world case studies, Mr. Pal illustrated the integration of AI tools in identifying complex patterns within medical data, thus aiding in early diagnosis and tailored patient care.

Dr. Rajesh Saha, Department of Electronics and Communication Engineering, NIT Silchar, India, lectured on Analytical modelling techniques of FinFET, which advanced modeling strategies in FinFET technology, emphasizing its synergy with machine learning for enhanced performance and efficiency. He elaborated on the use of machine learning algorithms to optimize semiconductor designs, improve device performance, and predict manufacturing outcomes. The session underscored the critical role of AI and

machine learning in advancing semiconductor technology, enabling the development of next-generation electronic devices.

Day 5: Predictive Modelling and Career Readiness

Dr. Debashree Guha Adhya (IIT Kharagpur) delivered an engaging lecture on Predictive Mathematical Modeling in medical applications. She illustrated how these models are revolutionizing healthcare by improving accuracy in diagnostics, forecasting disease outbreaks, and optimizing treatment plans. Dr. Guha Adhya emphasized the role of machine learning in enhancing the efficacy of predictive models, providing real-world examples to illustrate their transformative potential in medical research and practice.

Mr. Biswajit Pal, Director, Data Science at Kenvue (Consumer Products division of Johnson & Johnson), lectured on Building a Winning Approach for Data Science Campus Interviews and provided valuable insights into preparing for data science campus interviews, offering practical advice on skill development, resume building, and effective interview strategies. He discussed the most in-demand skills in the industry and shared tips for aspiring professionals to stand out in competitive job markets.

The day concluded with an interactive, hands-on session led by Mr. Yogesh Tak, Senior Data Scientist at Kenvue (Consumer Products division of Johnson & Johnson). Participants applied machine learning techniques to real-world datasets, tackling challenges like feature engineering, model selection, and evaluation. This session enabled attendees to translate theoretical knowledge into practical expertise, fostering confidence in solving data-driven problems.

Day 6: Multi-Objective Optimization and Mental Health AI

On sixth day resource person Dr. Sujit Kumar Das, Department of Computer Science and Engineering, NIT Warangal, who delivered an engaging lecture on Multi-objective optimization and applications, which are evolutionary algorithms for solving multi-objective optimization challenges. He delved into techniques such as genetic algorithms and particle swarm optimization, demonstrating their applications in complex problem-solving scenarios. Participants gained insights into designing and implementing these algorithms to achieve optimal solutions in diverse fields.



Next, Prof. Niladri Chatterjee, Prof. (HAG) Department of Mathematics, School of AI, IIT Delhi, presented an insightful PPT on “AI in Healthcare: Case Study on Mental Health”. He explored how machine learning algorithms are being used to detect early signs of mental health conditions, emphasizing the importance of integrating technical accuracy with ethical considerations. Prof. Chatterjee addressed challenges such as data privacy, bias in mental health predictions, and the need for explainability in AI systems. His session provided a comprehensive view of the potential and limitations of AI-driven mental health interventions.

Day 7: Evolutionary Computation and Data Visualization

The final day began with a session by Prof. Rammohan Mallipeddi, School of Electronics Engineering, Kyungpook National University, Korea. He delved into Modeling, Simulation and Optimization from the Perspective of Evolutionary Computation. He demonstrated the use of these algorithms in optimizing problems across various domains, emphasizing their adaptability and robustness. Prof. Mallipeddi's session inspired participants to explore creative solutions for complex challenges using evolutionary computation.

Prof. E. Sreenivasa Reddy, Department of Computer Science and Engineering, VIT Andhra Pradesh, concluded the FDP with a highly interactive hands-on session on integrating machine learning with data visualization techniques. Participants were guided through practical exercises on visualizing complex datasets to uncover patterns, trends, and actionable insights. The session equipped attendees with essential skills to effectively communicate data-driven results through compelling visual narratives.

Conclusion

The FDP successfully completed on 23rd December, 2024 and provided a comprehensive platform for faculty members to enhance their expertise in machine learning, artificial intelligence, data science, and modeling. The blend of expert lectures and practical sessions ensured that participants gained both theoretical knowledge and hands-on skills.

Lunch Availed by Staff 10.01.2025

| | |
|---------------------------|-----|
| 'A', 'H', 'U' & 'N' Block | 535 |
|---------------------------|-----|

Power Consumption on the campus

| | |
|--|------|
| (A, H, U & N –Block, Boys hostel, Guest house, etc.) | 6670 |
|--|------|

Staff Attendance Details on 10-01-2025

| Staff | % of Attendance | % of Staff on duty | % of Staff on Leave | % of Staff on Absent |
|--------------|-----------------|--------------------|---------------------|----------------------|
| Teaching | 85.05 | 0.61 | 14.95 | 0 |
| Non teaching | 93.38 | 2.36 | 5.67 | 0.95 |

NTR Vignan Library 09.01.2025

| | |
|----------------------------|------|
| NO. OF VISITORS (STUDENTS) | 1922 |
| NO. OF VISITORS (STAFF) | 101 |
| NO. OF BOOK ISSUES | 83 |
| NO. OF BOOK RETURNS | 99 |

Vignan Priyadarshini Girls Hostel 09.01.2025

| Time | Present | Absent | Total | Wastage in kgs |
|-----------|---------|--------|-------|----------------|
| Breakfast | 1601 | 607 | 2208 | 16 |
| Lunch | 1582 | 626 | 2208 | 43 |
| Snacks | 1544 | 664 | 2208 | 16 |
| Dinner | 1518 | 690 | 2208 | 47 |

Vignan Vihar Boys Hostel 09.01.2025

| Time | Present | Absent | Total | Wastage in kgs |
|-----------|---------|--------|-------|----------------|
| Breakfast | 1375 | 655 | 2030 | 10 |
| Lunch | 1737 | 293 | 2030 | 20 |
| Snacks | 1529 | 501 | 2030 | 12 |
| Dinner | 1611 | 419 | 2030 | 22 |

Finance 09.01.2025

| Particulars | Amount in Lakhs |
|---|--------------------|
| Remuneration Payable (Resource Persons) | 5,000 |
| Dr. Ameena Begum, Coordinator, SA Off Campus | 24,150 |
| Vignan University Construction A/c | 1,00,00,000 |
| A.Gourisankar Rao, Dy. Registrar & Head Media | 50,000 |
| MAANASA Bombay Dyeing Show Room,GNT | 40,364 |
| A.Gourisankar Rao, Dy. Registrar & Head Media | 50,000 |
| UNIDIMENASIONS(EXAM CELL) | 12,886 |
| Sri Jayalakshmi Printers (Exam Cell) | 2,475 |
| Sri Nageshwar Deo Trust, Patna | 11,70,000 |
| Malleswari Tours & Travels, (N. Durga Prasad) | 32,026 |
| Dr D.Satyanarayana, Mech Dept | 23,200 |
| Dr. K. Annapurna, Asst. Prof, Ece | 78,000 |
| K.Rachanajali, Asst.Prof.EEE Dept | 20,000 |
| Ashok Book Centre,VJA | 8,510 |
| Sk.Noor Bashia, Marketing Staff | 7,000 |
| Dr.Shubhalakshmi Sengupta PI | 10,435 |
| Gundala Ludhar Papa, Herbal Garden Labour | 9,355 |
| Balaji Enterprises 24-25 (HYD) | 30,975 |
| Inkarp Instruments Pvt Ltd | 1,90,000 |
| Marri Industries Pvt Ltd- AAMCM1765D | 8,073 |
| Examination Remuneration (CDOE) | 1,05,855 |
| Examination Remuneration (CDOE) | 67,035 |
| DR. B. VENU, EXAM CELL COORDINATOR - OFF CAMPUS | 5,000 |
| Raj Kumar, Jhar Khand, AHS | 1,19,693 |
| Palasah Manufactures and Traders Pvt Ltd | 43,890 |
| Fee Collection from students - 82 | 50,53,400 |
| TOTAL | 1,71,67,322 |

Birthday Wishes
Students, Staff and Management wishes
Happy Birthday to
08.01.2025
Dr. Talari Naresh
Asst. Prof., AHS
Mrs. Ravuri Lalitha
Asst. Prof., CSE
09.01.2025
Mrs. N. Bhargavi
Teaching Assistant, S&H
Dr. Midhun Rudrapal
Assoc. Prof., Pharmacy
10.01.2025
Dr. Pradeep Gorre
Asst. Prof., ECE

Girls Hostel Students Information Date : 09-01-2025

| Total No. of students in hostel | Presentees | Students went to outing | |
|---|----------------------|-------------------------|----------------------|
| 2119 | 1513 | 606 | |
| Total no. of students attending for study hours | Attended | Not Attended | |
| ---- | ---- | ---- | |
| Total no. of students engaging in sports/NCC | Participated | Not participated | |
| Sports -100 NCC-50 | 0 | 150 | |
| No. of sick students in the hostel UG | | | |
| 1 st year | 2 nd year | 3 rd year | 4 th year |
| 5 | 3 | 2 | 1 |

II, III & IV B.Tech. Dept. wise consoldt. attend. (1st hour) (Excluding Blocked Students)

| Branch | Strength | Absent | Present | % |
|--------------|-------------|-------------|-------------|-----------|
| BI | 267 | 267 | 105 | 39 |
| AIANDML | 621 | 621 | 230 | 37 |
| CSE | 2506 | 2506 | 917 | 36 |
| BM | 124 | 124 | 43 | 34 |
| DS | 149 | 149 | 50 | 33 |
| EEE | 182 | 182 | 54 | 29 |
| BIOTECH | 358 | 358 | 100 | 27 |
| MECH | 109 | 109 | 24 | 22 |
| FT | 66 | 66 | 15 | 22 |
| CSECS | 193 | 193 | 39 | 20 |
| CIVIL | 66 | 66 | 13 | 19 |
| ECE | 763 | 763 | 147 | 19 |
| AG | 62 | 40 | 11 | 17 |
| CSBS | 88 | 88 | 15 | 17 |
| IT | 381 | 381 | 57 | 14 |
| RA | 51 | 51 | 7 | 13 |
| TT | 13 | 13 | 1 | 7 |
| CHEM | 29 | 29 | 2 | 6 |
| TOTAL | 6028 | 6006 | 1830 | 30 |

PG Dept. wise consoldt. attend. (1st hour) (Excluding Blocked Students)

| Branch | Strength | Absent | Present | % |
|--------------|------------|------------|-----------|-----------|
| MBA | 153 | 153 | 27 | 17 |
| TOTAL | 153 | 153 | 27 | 17 |

Diploma Dept. wise consoldt. attend. (1st hour) (Excluding Blocked Students)

| Branch | Strength | Absent | Present | % |
|--------------|-----------|-----------|-----------|-----------|
| DECE | 9 | 9 | 7 | 77 |
| DCSE | 74 | 74 | 29 | 39 |
| TOTAL | 83 | 83 | 36 | 43 |

UG Dept. wise consoldt. attend. (1st hour) (Excluding Blocked Students)

| Branch | Strength | Absent | Present | % |
|--------------|------------|------------|-----------|-----------|
| BBA | 336 | 336 | 60 | 17 |
| BCA | 58 | 58 | 9 | 15 |
| B.PHARM | 116 | 116 | 10 | 8 |
| BSC HONS | 123 | 114 | 2 | 1 |
| TOTAL | 633 | 624 | 81 | 12 |

Branch Wise Attendance Entry Status Report 10-01-2025

| Branch Name | Total No of Periods | No of Periods Posted Attendance In-Time | No of Periods Posted Attendance Late |
|--------------|---------------------|---|--------------------------------------|
| CSE | 296 | 47 | 249 |
| ECE | 208 | 68 | 140 |
| BIOTECH | 105 | 24 | 81 |
| AIANDML | 93 | 21 | 72 |
| BI | 86 | 25 | 61 |
| EEE | 38 | 5 | 33 |
| MECH | 42 | 12 | 30 |
| DS | 27 | 5 | 22 |
| BM | 34 | 13 | 21 |
| RA | 29 | 9 | 20 |
| CIVIL | 25 | 6 | 19 |
| FT | 26 | 7 | 19 |
| IT | 32 | 16 | 16 |
| CHEM | 20 | 6 | 14 |
| AG | 16 | 2 | 14 |
| TT | 21 | 7 | 14 |
| CSECS | 14 | 6 | 8 |
| CSBS | 14 | 6 | 8 |
| TOTAL | 1126 | 285 | 841 |

The things taught in colleges and schools are the means of education.