Mahipal Prithvisinh Jadeja

Email : mahipaljadeja.cse@mnit.ac.in

YouTube-CS Simplified
LinkedIn

RESEARCH INTEREST

Theoretical Computer Science, Graph Theory, Artificial Intelligence, Social Network Analysis, Graph Neural Networks, Generative AI in Education, Machine Learning on Graphs.

EDUCATION

- **Dhirubhai Ambani Institute of Information and Communication Technology** — Gandhinagar,, INDIA
  PhD., Computer Science and Engineering (CSE),Coursework CPI: 9.25/10.00 — *January 2013 - February- 2018*
- **CSPIT, Changa (University: Gujarat Technological University)** — Changa, INDIA
  B.E. Computer Engineering (CE), CPI: 7.48/10.00 — *July 2008 - June 2012*

EXPERIENCE

- **Malviya National Institute of Technology (MNIT) Jaipur** — Jaipur, Rajasthan
  Assistant Professor, Department of Computer Science and Engineering — *March 2019 - Current*
  - **Scope of Work**: Teaching and Research Work
- **Adani Institute of Infrastructure Engineering (AIIE)** — Ahmedabad, Gujarat
  Assistant Professor, Department of Information and Communication Technology — *December 2017 - February 2019*
  - **Scope of Work**: Teaching and Research Work
- **K J Campus, Savli** — Savli, Gujarat
  Assistant Professor, Department of Computer Engineering — *July 2012 - November 2012*
  - **Scope of Work**: Teaching

ACADEMIC TEACHING PORTFOLIO

Advanced Data Structures and Algorithms, Computer Science and Programming, Data Structures and Algorithms, Database Management Systems (DBMS), Discrete Mathematics, Logic in Computing, Python Programming, and Social Network Analysis.

ONLINE TEACHING

- **Massive Open Online Course (MOOC) on Python Programming**
  - Successfully designed and delivered a comprehensive Python programming course, attracting over **1600** learners to date.
  - Achieved an outstanding average rating of **4.8/5**, reflecting the high quality of instruction and learner satisfaction.

- **YouTube Channel: CS Simplified**
  - Uploaded more than **150** academic videos related to computer science and online teaching tips.
  - Successfully cultivated a dedicated audience of **2.8K** subscribers, amassing over **3.7** lakh views as of 24th February 2025.
  - Consistently maintained an exceptional average like-dislike ratio of **97.6%**, demonstrating a high level of viewer engagement and content approval.

- **A Hindi-Centric GPT for Python Programming, First of its Kind in India: Python Ki Pathshala**
  - Designed and developed Python Ki Pathshala GPT, an AI-powered educational assistant that dynamically generates **personalized examples, real-world applications, and engaging stories** to make Python learning intuitive.
  - Supports learning in **Hindi, English, and Hinglish**, breaking language barriers in Python education.
  - As of 24th February 2025, facilitated over **1000+** personalized learning conversations, making Python accessible and interactive for diverse learners.

Journal Publications

1. S. Rohilla, **M. Jadeja**, E. Pilli, P. Vyas and P. Gehlot, "CC- GCN: A novel Graph-based approach for Identification and Detection of Autism Spectrum Disorder", Multimedia Tools and Applications (Springer)-2024 [DOI]

2. P. Thakur, S. Chouhan and **M. Jadeja**, "Enhancing Software Code Smell Detection with Modified Cost-Sensitive SVM", International Journal of System Assurance Engineering and Management (Springer)-2024 [DOI]

3. R. Saxena, P.Paira and **M. Jadeja**, "CLUS-BET: Improving Influence Propagation and Classification in Networks using a Novel Seed Selection Technique", Social Network Analysis and Mining (Springer)-2024 [DOI]

4. A. Verma, **M. Jadeja** and S. Jayaswal, "RW-HeCo: A Random Walk and Network Centrality based Graph Neural Network for Community Detection in Heterogeneous Networks", Multimedia Tools and Applications (Springer) 2024 [DOI]

5. N. Garg, S. Garg, **M. Jadeja**, Y. Meena, D. Gopalani and G. Chauhan, "A novel dominating set and centrality based graph convolutional network for node classification", Multimedia Tools and Applications (Springer) 2024 [DOI]

6. **M. Jadeja**, R. Muthu and R. Goyal, "A New Characterisation of Total Graphs", Palestine Journal of Mathematics (PJM) 2024 [DOI]

7. P. Thakur, S. Chouhan and **M. Jadeja**, CBReT: A Cluster-Based Resampling Technique for Dealing with Imbalanced Data in Code Smell Prediction", Knowledge Based Systems (Elsevier) Volume :286, 2024 [DOI]

8. R. Saxena, S.Patil, A. Verma, **M. Jadeja**, P. Vyas, V. Bhateja, and J. Chun-Wei Lin, "An Efficient Bet-GCN Approach for Link Prediction" , International Journal of Interactive Multimedia and Artificial Intelligence (IJIMAI) (Universidad Internacional de la Rioja) Volume :8(1) / 38-52 / 2023 [DOI]

9. A. Verma, R. Saxena, **M. Jadeja**, V. Bhateja and J. Chun-Wei Lin, "Bet-GAT: An Efficient Centrality based Graph Attention Model for Semi Supervised Node Classification", Applied Sciences (Special Issue: Integrated Artificial Intelligence in Data Science) (MDPI) Volume:13, 2023 [DOI]

10. A. Verma and **M. Jadeja**, "CB-SAGE: A novel centrality based graph neural network for floor plan classification", Engineering Applications of Artificial Intelligence, Elsevier (Elsevier) Volume :126, 2023 [DOI]

11. R. Saxena, **M. Jadeja** and V. Bhateja, "Propagation analysis of COVID-19: An SIR model-based investigation of the pandemic", Arabian Journal for Science and Engineering,Volume:48, pp. 11103–11115, 2023 [DOI].

12. **M. Jadeja**, R. Muthu and V. Sunitha, "Set Labelling Vertices To Ensure Adjacency Coincides With Disjointness," in *Electronic Notes in Discrete Mathematics*, vol. 63, pp. 237-244, December 2017. [DOI]

13. **M. Jadeja** and R. Muthu, "Uniform Set Labelling Vertices To Ensure Adjacency Coincides With Disjointness," in *Journal of Mathematical and Computational Science*, vol. 7, no. 3, pp. 537-553, May 2017. [DOI]

14. **M. Jadeja** and R. Muthu, "Labeled Object Treemap: A New Graph-Labeling Based Technique for Visualizing Multiple Hierarchies," in *Annals of Pure and Applied Mathematics*, vol. 13, no. 1, pp. 49-62, January 2017.[DOI] Also appeared in *Proceedings of The 19th Japan-Korea Joint Workshop on Algorithms and Computation (WAAC 2016)*

Conference Publications

1. R. Saxena and **M. Jadeja**, "Analysing Shifts in Perceptions of Indians During COVID-19 Pandemic by Mining Tweets", 3rd International Conference on Intelligent Communication and Computational Techniques by:IEEE at Jaipur, India, 2023.

2. A. Verma and **M. Jadeja**, "An Efficient Centrality-Based GNN for Community Detection in Dynamic Networks", 4th International Conference on SMART SYSTEMS: INNOVATIONS in COMPUTING by :Springer at Manipal University, Jaipur, India, 2023

3. R. Saxena, **M. Jadeja** and Pranshu Vyas, "An Efficient Influence Maximization Technique Based on Betweenness Centrality Measure and Clustering Coefficient ", 15th International Conference on Computer and Automation Engineering by :IEEE at Sydney, Australia, 2023

4. P. Thakur, **M. Jadeja**, S. Chouhan, "Text Augmentation Based Imbalance Learning for Unstructured Text Data", 4th International Conference on Cybernetics, Cognition and Machine Learning Applications-ICCCMLA by :IEEE at Goa / 73-77 / 2022.

5. **M. Jadeja** and G. Kabra ,"Style Transfer for Videos With Audio", Proceedings of the International Conference on Paradigms of Computing, Communication and Data Sciences: PCCDS 2020 by Springer Singapore, pp. 607-617, 2020

6. R. Saxena, **M. Jadeja** and A. Verma ,"Efficient Information Flow Based on Graphical Network Characteristics", Proceedings of the International Conference on Paradigms of Computing, Communication and Data Sciences: PCCDS 2020 by Springer Singapore, pp. 515-526, 2020

7. A. Verma, **M. Jadeja** and R. Saxena ,"Network Structural Analysis Based on Graphical Measures and Metrics" 5th International Conference on Information & Communication Technology for Sustainable Development (ICT4SD 2020) by Springer, pp. 147-156, 2020

8. **M. Jadeja** and R. Muthu, "Edgeless Graph: A New Graph Based Information Visualization Technique", International Conference on Mathematical Modeling, Computational Intelligence Techniques and Renewable Energy by :Springer-Advances in Intelligent Systems and Computing at Pandit Deendayal Petroleum University, Gandhinagar, 2020

9. **M. Jadeja**, H. Kanakia and R. Muthu ,"Interactive Labeled Object Treemap: Visualization Tool for Multiple Hierarchies" in Proceedings of Eighth Edition of International Conference on Frontiers of Intelligent Computing: Theory and Applications, FICTA 2020 by Springer Evolution in Computational Intelligence Advances in Intelligent Systems and Computing at National Institute of Technology Karnataka (NITK), 499-508, 2020

10. **M. Jadeja** and N. Varia, "Perspectives for Evaluating Conversational AI" in *Proceedings of International Workshop on Search-Oriented Conversational AI (http://scai.info/) @ACM ICTIR(SCAI' 2017)*, Amsterdam, Netherlands, 2017.

11. **M. Jadeja**, N. Varia and A. Shah, "Deep Reinforcement Learning for Conversational AI" in *Proceedings of International Workshop on Search-Oriented Conversational AI (http://scai.info/) @ACM ICTIR(SCAI' 2017)*, Amsterdam, Netherlands, 2017.

12. R. Goyal, **M. Jadeja**, R. Muthu and B. Patel, "A New Characterisation of Total Graphs" in *Proceedings of The 19th Japan-Korea Joint Workshop on Algorithms and Computation(WAAC 2016)*, Hakodate, Japan, 2016.

13. **M. Jadeja** and K. Shah, "Tree-Map: A Visualization Tool for Large Data," in *Proceedings of 1st International Workshop on Graph Search and Beyond @ACM SIGIR(GSB 2015)*, Santiago, Chile, pp. 9–13,2015

BOOKS

1. Reference Book, "Exploring Susceptible-Infectious-Recovered (SIR) Model for COVID-19 Investigation" ISBN:978-981-19-4175-7 published by - Springer Singapore Year: 2022 authors- R. Saxena, **M. Jadeja**, and V. Bhateja

BOOK CHAPTERS

1. S. Rohilla, **M. Jadeja**, and E. S. Pilli, "Do More with Less: Deep Learning in Medical Imaging" In Convolutional Neural Networks for Medical Image Processing Applications, Taylor & Francis, 2022.

2. R. Saxena and **M. Jadeja**, "Network Centrality Measures: Role and Importance in Social Networks." In Principles of Social Networking, pp. 29-54. Springer, Singapore, 2021.

3. A. Verma and **M. Jadeja**, "Temporal Network Motifs: Structure, Roles, Computational Issues, and Its Applications." In Principles of Social Networking, pp. 55-70. Springer, Singapore, 2022.

4. T. Rawka and **M. Jadeja**, "A Survey on Graph Neural Network Based Video Recommendation System" In Deep Learning for Social Media Data Analytics, Springer, 2022.

5. R. Joshi and **M. Jadeja**, "The Synergy of Clinical Psychology and Affective Computing: Advancements in Emotion Recognition and Therapy", Springer, 2024.

PHD RESEARCH SUPERVISED

Awarded

1. Atul Kumar Verma on **Navigating Real-World Networks: Centrality-Infused Graph Neural Network Paradigms** - Year: 2023.

2. Rahul Saxena on **Novel Techniques to Enhance Influence in Social Networks** - Year: 2023.

3. Praveen Singh Thakur on **Software Code Smell Detection in an Imbalanced Environment** - Year - 2024

Ongoing

1. Neeraj Garg on **Natural Language Processing using Graph Neural Networks**.

2. Shivani Rohilla on **A Learning Framework to Identify and Categorize Brain Disorders using Medical Imaging Techniques**.

PG RESEARCH SUPERVISED

1. Anshuman Yadav on **User Preference Based Fake News Detection** - Year: 2024-25.

2. Simran Setia on **CCBiT-GAT: Closeness centrality Bidirectional Temporal Graph Attention Network for Traffic Forecasting** - Year: 2024-25.

3. Rahul Shah on **Enhancing Cancer Prediction Using a Hybrid GGAT-GCN Network**- Year: 2024-25.

4. Ayush Sharma on **DrainMap: A PnP Optimization Technique for Hybrid Processors** - Year: 2023-2024.

5. Sneha Prajapati on **Influence Maximization in Social Networks** - Year: 2023-2024.

6. Sunny Raj on **Community Detection in Overlapping Networks** - Year: 2023-2024.

7. Toshi Rawka on **Sentiment Analysis for Movie Reviews using Graph Convolution Network** - Year: 2022-2023.

8. Vinodkumar Shirguri on **Influence Maximization in Social Networks using Graph Attention Networks and Different Centrality Measures** - Year: 2022-2023.

9. Saurabh Jayaswal on **Community Detection in Heterogeneous Networks** - Year: 2022-2023.

10. Kuldeep on **Fake News Detection in Social Network using BiLSTM** - Year: 2021-2022.

11. Mohan Singh on **Community Detection in Social Network** - Year: 2021-2022.

12. Rajesh Biswas on **Detection of Hateful Users on Twitter** - Year: 2021-2022.

EXPERT TALKS

1. Talk on **Creative Automation: Leveraging Generative AI in Education Development** in FDP in "Creativity & Innovation at Workplace" at JECRC University, Jaipur (Feb-2025)

2. Talk on **Introduction To Deep Learning** in Course on Artificial Intelligence & Cloud Computing at Indian Audit & Accounts Department, Regional Capacity Building & Knowledge Institute Jaipur (Feb-2025)

3. Talk on **Machine Learning Algorithms** in Course on Artificial Intelligence & Cloud Computing at Indian Audit & Accounts Department, Regional Capacity Building & Knowledge Institute Jaipur (Feb-2025)

4. Talk on **Auto ML and Deep Learning: Automating the Data Science Workflow** in ATAL FDP on "Fundamental of Data Science and Ethical Practices" at Online (organized by Department of CSE, Sardar Patel Institute of Technology, Mumbai) (Feb-2025)

5. Talk on **Next-Gen Research Strategies: AI Toolkit** in FDP on "Technology Enabled Teaching, Learning & Process for Institutes" at Online (organized by E&ICT Academy IIT Guwahati) (Feb-2025)

6. Talk on **Next-Gen Work Strategies: AI Toolkit** in FDP on "Technology Enabled Teaching, Learning & Process for Institutes" at Online (organized by E&ICT Academy IIT Guwahati) (Feb-2025)

7. Talk on **Leveraging AI for Assessment and Engagement** in Faculty Development Program on "AI and Virtual Labs Integration in Teaching-Learning Pedagogy" at Vivekananda Global University-Jaipur (Jan-2025)

8. Talk on **Link Prediction in Social Networks** in E&ICT Academy FDP on "Recent Advances in Social Network Analysis" at Indian Institute of Information Technology, Design and Manufacturing (IIITDMJ), Jabalpur (Jan-2025)

9. Talk on **Hands-on: Network Models and Graph Visualizations Using Real-World Datasets** in E&ICT Academy FDP on "Recent Advances in Social Network Analysis" at Indian Institute of Information Technology, Design and Manufacturing (IIITDMJ), Jabalpur (Jan-2025)

10. Talk on **Network Growth Models and Databases** in E&ICT Academy FDP on "Recent Advances in Social Network Analysis" at Indian Institute of Information Technology, Design and Manufacturing (IIITDMJ), Jabalpur (Jan-2025)

11. Talk on **Social Networks: Introduction and Applications** in E&ICT Academy FDP on "Recent Advances in Social Network Analysis" at Indian Institute of Information Technology, Design and Manufacturing (IIITDMJ), Jabalpur (Jan-2025)

12. Keynote on **The Grammar of Intelligence: Crafting Prompts for Smart Data Interactions** in International Conference on Innovations in Data Science (ICIDS 2024) at Manipal University, Jaipur (Nov-2024)

13. Talk on **AI-powered Education: Enhancing Learning, Collaboration, and Research with Humata AI** in Invited Expert for the Generative AI in Education Group at Online-Organized by Dr. Rea Lavi from Massachusetts Institute of Technology (MIT), USA (Sep-2024)

14. Talk on **Role as First Responder and Handling Digital Device (Hands on)- Artificial Intelligence** in Constable Band(Recruits) Basic Training at Intelligence Training Academy, Jaipur (Sep-2024)

15. Talk on **Open Educational Resources (OER)** in 5 Days Faculty Development Program on Enhancing Online Teaching and Learning at Online (Organized by Vivekananda Global University Jaipur) (Sep-2024)

16. Talk on **AI in Academia: Revolutionizing How We Learn, Present, and Understand** in SUPER 30 Digital Skilling & Job Readiness Program at MNIT Innovation & Incubation Center (MIIC) (Sep-2024)

17. Talk on **Coding the Future: Why Computer Science is Your Key to Making a Difference** in Vigyan Jyoti Conclave (DST) at MNIT Jaipur (Aug-2024)

18. Talk on **Innovation/Prototype Validation: Converting Innovation into Start-Up** in Webinar at S.S. Jain Subodh P.G. Mahila Mahavidyalaya, Jaipur (Aug-2024)

19. Talk on **Empowering Research and Professional Tasks: The AI Toolkit for Success** in STTP on Recent Advancement in Artificial Intelligence and Robotics (RAAIR-24) at Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat (July- 2024)

20. Talk on **Graph-Powered Deep Learning: Exploring Deep Learning on Graphs with Real-World Applications** in STTP on Recent Advancement in Artificial Intelligence and Robotics (RAAIR-24) at Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat (July- 2024)

21. Talk on **AI as a Research Partner: Practical Applications for Advancing Professional and Academic Tasks** in Workshop on AI Tools at Department of Artificial Intelligence and Machine Learning Chandubhai S. Patel Institute of Technology, Changa (June-2024)

22. Talk on **Revolutionizing Research and Professional Tasks with AI: Practical Use Cases** in Expert Talk for Ph.D. Program (corporate heads) at JECRC University, Jaipur (June-2024)

23. Talk on **Graph Machine Learning: From Theory to Practical Applications** in STC on Network Science using Python at Department of Computer Science and Engineering, NITTTR, Chandigarh (May-2024)

24. Talk on **iGraph Essentials: Python's Toolkit for Network Analysts** in STC on Network Science using Python at Department of Computer Science and Engineering, NITTTR, Chandigarh (May-2024)

25. Talk on **Decoding Network Influence: Centrality Measures for Identifying Key Nodes** in STC on Network Science using Python at Department of Computer Science and Engineering, NITTTR, Chandigarh (May-2024)

26. Talk on **Navigating SPSS: Fundamental Tools and Techniques for Beginners** in Expert Talk for "Quantitative Techniques & Computer Applications" Subject at JECRC University, Jaipur (April-2024)

27. Talk on **A Closer Look at Excel Treemap: Transforming Data into Visual Stories** in Expert Talk for "Quantitative Techniques & Computer Applications" Subject at JECRC University, Jaipur (Mar-2024)

28. Talk on **Excel Excellence: Crafting, Running, and Editing Macros** in Expert Talk for "Quantitative Techniques & Computer Applications" Subject at JECRC University, Jaipur (Mar-2024)

29. Talk on **Excel Excellence: PivotTables for Powerful Data Analysis** in Expert Talk for "Quantitative Techniques & Computer Applications" Subject at JECRC University, Jaipur(Mar-2024)

30. Talk on **Beyond ANNs: Unveiling CNNs through Theory and Practice on CIFAR-10 in Computational Techniques** Using Artificial Intelligence and Machine Learning for Social Science and Engineering Applications at MNIT Jaipur (Organized by Department of Chemical, CSE and HSS) (Mar-2024)

31. Talk on **Deep Learning Decoded: A Hands-On Introduction to ANNs and Core Concepts in Computational Techniques** Using Artificial Intelligence and Machine Learning for Social Science and Engineering Applications at MNIT Jaipur (organized by Department of Chemical, CSE and HSS) (Mar-2024)

32. Talk on **Mastering Excel: Unleashing the Power of Data Tables and Goal Seek for Strategic Decision-Making** in Expert Talk for "Quantitative Techniques Computer Applications" Subject at JECRC University, Jaipur (Mar-2024)

33. Talk on **The Future is Now: A Deep Dive into AI, Deep Learning, and Their Transformative Applications** in High-End Workshop (KARYASHALA) on Modelling and Optimization in Green Manufacturing at MNIT Jaipur (organized by the Department of Mechanical Engineering) (Feb-2024)

34. Talk on **The Art of Optimization: Exploring Greedy Algorithms, Dynamic Programming, and Car Sequencing** in High-End Workshop (KARYASHALA) on Modelling and Optimization in Green Manufacturing at MNIT Jaipur (organized by the Department of Mechanical Engineering) (Feb-2024)

35. Talk on **Navigating the Depths of AI: Deep Learning Applications and Innovations** in Short Term Course on Machine Learning Using Python at Online (organized by Department of Physics, MNIT Jaipur) (Feb-2024)

36. Talk on **Basics of Python Programming** in Short Term Course on Machine Learning Using Python at Online (organized by Department of Physics, MNIT Jaipur) (Feb-2024)

37. Keynote on **Navigating the AI Revolution: Key Concepts and Groundbreaking Applications** in International multidisciplinary conference on emerging trends and perspectives in research and innovations at S.S. Jain Subodh P.G. Mahila Mahavidyalaya (Feb-2024)

38. Talk on The Art of Decision Making in Excel: Advanced IF, Nested Statements, and More in Expert Talk for "Quantitative Techniques & Computer Applications" Subject at JECRC University, Jaipur (Jan-2024)

39. Talk on Mastering Excel: A Deep Dive into Advanced Formulas and Functions in Expert Talk for "Quantitative Techniques & Computer Applications" Subject at JECRC University, Jaipur (Jan-2024)

40. Talk on **Python's iGraph Package: Unravelling the Essentials for Network Analysis** in STC on Complex Networks Analysis using Python at Department of Computer Science and Engineering, NITTTR, Chandigarh (Jan-2024)

41. Talk on **Connecting the Dots: Network Analysis in Medicine and Natural Language Processing** in STC on Complex Networks Analysis using Python at Department of Computer Science and Engineering, NITTTR, Chandigarh (Jan-2024)

42. Talk on **Beyond Nodes and Edges: Network Analysis in the Architectural Domain** in STC on Complex Networks Analysis using Python at Department of Computer Science and Engineering, NITTTR, Chandigarh (Jan-2024)

43. Talk on **Graph Neural Networks for Data Analytics** in FDP on Data Analytics & Cloud Security at Manipal University Jaipur (Jul-2023)

44. Keynote on **Graph Neural Networks: From Theory to Practice** in Two days workshop on Metaverse, Vision and Language Processing: The Industrial Aspect at Manipal University Jaipur (Feb-2023)

45. Keynote on **A Modern Treatment of the 15 Puzzle** in EICT FDP on Advanced Computational Intelligence Techniques for Engineering and Science Applications at MNIT Jaipur (Jan-2023)

46. Keynote on **NP-Completeness and Approximation Algorithms** in Expert Talk at Poornima College of Engineering, Jaipur (Dec-2022)

47. Keynote on **Information diffusion on Social Networks-Models, Algorithms and their Implementations** in Short Term Course on Social Network Analysis at National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Nov-2022)

48. Keynote on **Applications of Graph Neural Networks- Node Classification and Link Prediction on Social Networks** in Short Term Course on Social Network Analysis at National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Nov-2022)

49. Keynote on **Introduction to Graph Neural Networks (GNNs)-Graph Convolution Networks (GCN), Graph attention networks (GATs) and GraphSAGE** in Short Term Course on Social Network Analysis at National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Nov-2022)

50. Keynote on **Introduction to Deep Learning and Convolution Neural Networks (CNN)** in Short Term Course on Social Network Analysis at National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Nov-2022)

51. Talk on **Applications of Graph ML: Room classification on floor plan graphs and Estimated arrival time prediction in Google Maps** in Short Term Course on Machine Learning and Predictive Analysis using Python at National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Jul-2022)

52. Talk on **Introduction to Machine Learning with Graphs** in Short Term Course on Machine Learning and Predictive Analysis using Python at National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Jul-2022)

53. Talk on **Multivariate Linear Regression** in STC on Machine Learning using Python at National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Mar-2022)

54. Talk on **Python for Structural Analysis of Graphs** in STC on Computer Programming using Python at National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Feb-2022)

55. Talk on **Introduction to Python-Networkx** in STC on Computer Programming using Python at National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Feb-2022)

56. Talk on **Introduction to Linear Regression with One Variable** in STC on Machine Learning using Python at National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Mar-2022)

57. Talk on **Node Classification in Social Networks** in STC on Social Networks Analysis at Organised by National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Nov-2021)

58. Talk on **Information diffusion on Social Networks – Models, Algorithms and their Implementations** in STC on Social Networks Analysis at Organised by National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Nov-2021)

59. Talk on **Overview of Social Networks Analysis** in STC on Social Networks Analysis at Organised by National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh (Nov-2021)

60. Talk on **Introduction to Graph Neural Networks** in STC on Social Networks Analysis at Organised by National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh (Nov-2021)

61. Talk on **Code Generation and Compiler Optimization** in Expert Talk for "Language Processor" Subject at Charotar University of Science and Technology - Changa (Oct-2021)

62. Talk on **Graph Neural Networks (GNNs): Deep Learning on Social Networks (with Hands-on)** in ATAL Faculty Development Program on Network Science: Theory, Challenges and Applications at Online (Organised by Amity School of Engineering & Technology, Amity University Rajasthan) (Aug-2021)

63. Talk on **Introduction to Deep Learning and Convolution Neural Network (CNN) (with Hands-on)** in ATAL Faculty Development Program on Network Science: Theory, Challenges and Applications at Online (Organised by Amity School of Engineering & Technology, Amity University Rajasthan) (Aug-2021)

64. Talk on **Deep Learning on Social Networks** in Workshop at Pandit Deendayal Energy University, Gandhinagar (Apr-2021)

65. Talk on **Introduction to Deep Learning** in Workshop at Pandit Deendayal Energy University, Gandhinagar (Apr-2021)

66. Talk on **Network Centrality Measures** in Workshop at Pandit Deendayal Energy University, Gandhinagar (Apr-2021)

67. Talk on **Introduction to Social Network Analysis** in Workshop at Pandit Deendayal Energy University, Gandhinagar (Apr-2021)

68. Keynote on **Research Directions in Social Network Analysis (SNA)** in International Virtual Conference On Computational Mathematics at Virtual (Organized by Rathinam College of Arts Science) (Jan-2021)

69. Talk on **Research directions in social network analysis(SNA)** in National Workshop on Some Recent Tools in Analysis Under Research at Virtual (organized by Department of Applied Sciences, Chitkara University) (Oct-2020)

70. Talk on **Searching and Hashing** in Short Term Training Program on "Data Structure and Algorithms" at Rajkiya Engineering College Bijnor (Oct-2019).

EVENTS ORGANIZED

1. International level Short Term Course on Summer School on **"Artificial Intelligence and Machine Learning for Engineering and Social Science and Research"** at MNIT, Jaipur, India from 04-09-2023 to 08-09-2023.

2. National level Short Term Course on **Android Programming** (Funded by E & ICT Academy) at Jointly organized by IITG, NIT Patna, MNIT Jaipur and IITDM Jabalpur, Online, India from 18-07-2022 to 22-07-2022.

3. National level Short Term Course on **"Natural Language Processing"** (Funded by E & ICT Academy) at Jointly organized by NITP, IIT Roorkee, IIT Kanpur, IIITDM Jabalpur & MNITJ, Online, India from 07-02-2022 to 18-02-2022.

4. National level Short Term Course on **"Android App Development Using Java"** (Funded by E & ICT Academy) at Jointly organized by IITG, IIITDMJ, NITP & MNITJ, Online, India from 23-10-2021 to 01-11-2021.

5. National level Workshop on AICTE Training And Learning (ATAL) Academy sponsored FDP On **"Computer Science and Biology"** at Malaviya National Institute of Technology, Jaipur, India from 18-01-2021 to 22-01-2021.

6. National level Workshop on 5 days Skill Development Workshop on **"Fundamentals of Python Programming Skills"** at MNIT, Jaipur, India from 31-08-2019 to 08-09-2019.

7. National level Workshop on 5 days Skill Development Workshop on **"Data Structure Fundamentals"** at MNIT, Jaipur, India from 10-08-2019 to 18-08-2019.

8. National level Workshop on 5 days Skill Development Workshop on **"Fundamentals of C Programming Skills"** at MNIT, Jaipur, India from 10-08-2019 to 18-08-2019.

ADMINISTRATIVE RESPONSIBILITIES

1. **Centre Co-Incharge, CSAB 2024** in MNIT from 1-4-2024 to Till Date.

2. **Coordinator (Teaching Learning Management System)** in MNIT from 28-04-2023 to Till Date.

3. **Digital Outreach Committee Member** in MNIT from 08-08-2022 to Till Date.
   Played a crucial role in achieving remarkable growth of the institute's social media handles: YouTube (**3.4x** reach), Instagram (**4.5x** reach), and Facebook (**1.6x** reach) since August 2022.

4. **Institute Ranking Committee Member** in MNIT from 29-07-2022 to Till Date.
   Contributed significantly to the improvement of NIRF 2023 ranking of MNIT.

5. **CACS Web Portal (Coordinator)** in MNIT from 22-03-2021 to 21-03-2022.

6. **NIRF Sub-Committee (Departmental Faculty In-charge)** in MNIT from 17-12-2020 to 16-12-2021.

7. **NBA First Year Academics Committee Member** in MNIT from 16-09-2020 to 15-09-2021.

8. **Faculty Co-Coordinator (Virtual Class Room, Video Surveillance, Digital Library)** in MNIT from 28-07-2020 to 18-07-2022.

9. **Nodal Officer I-stem Portal (Indian Science Technology and Engineering Facility map)** in MNIT from 27-01-2020 to 26-01-2021.

10. **Faculty Advisor (Alumni Magazine "AluMNITimes")** in MNIT from 27-09-2019 to 01-05-2020.

PROFESSIONAL ACTIVITIES

Chandubhai S. Patel Institute of Technology, Charusat University — Anand, Gujarat
Board of Studies (BOS) Member, B.Tech (Information Technology) — *Dec 2022 - Present*

Chandubhai S. Patel Institute of Technology, Charusat University — Anand, Gujarat
Board of Studies (BOS) Member, B.Tech (AI-ML) — *Sep 2023 - Present*

Vishvakarma Skills University — Jaipur, Rajasthan
Board of Studies (BOS) Member, Artificial Intelligence — *Mar 2024 - Present*

Personal achievements

- I was offered a travel grant of **400** euros for attending and presenting my work at SCAI 17 workshop which was held at Amsterdam, Netherlands on Oct 1, 2017. The grant was offered by sponsors of the event (Microsoft, Facebook and Google).

- **Jest** 2012 qualified with **241** AIR.

- Ranked 8th in Gujarat and 5th in Vadodara in 10th board exam.

Skills Summary

- **Languages**: C, Python
- **Operating system**: Windows/Linux (Ubantu)

References

1. Dr. Rahul Muthu (PhD Supervisor)
Associate Professor
Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT)
Email: rahul_muthu@daiict.ac.in

2. Dr. Srikrishnan Divakaran (PhD Co-supervisor)
Associate Professor
Krea University
Email: srikrishnan.divakaran@krea.edu.in

3. Dr. V. Sunitha
Professor
Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT)
Email: v_suni@daiict.ac.in