DR. VIPUL VEKARIYA

Dean, Faculty of Engineering & Technology at Parul University, PhD in Computer Science & Engineering, leading academic innovation, mentoring talent, and driving scalable solutions in education and technology.

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PROFESSIONAL PROFILE

Academic Leader | EdTech Innovator | Research Mentor | International Collaborator | 20 Years of Experience | Resilience Administrator | Strategic Planner | Driving Solutions in Education & Beyond

- With a deep-rooted passion for transformative education, academic excellence, and future-ready skills, I currently serve as the Dean of the Faculty of Engineering and Technology at Parul University, leading one of the largest and most dynamic academic units in India. With a student strength of over 32,000 and a committed faculty team of 800+, I drive academic strategy, policy execution, and technological integration to shape next-generation engineering talent.
- ♣ My leadership encompasses a diverse portfolio from curriculum innovation and digital transformation to global collaborations, grant mobilization, and faculty capacity building. I believe in a student-centric, outcome-based education framework that bridges industry expectations with academic delivery.

Academic Leadership & Governance

- As Dean, I lead the academic, administrative, and strategic planning functions of the Faculty of Engineering and Technology, the most expansive division of Parul University. My role involves:
- > Overseeing curriculum development, faculty performance, and inter-departmental governance to ensure high academic standards across disciplines.
- Managing the seamless academic coordination and operational activities for over 32,000 students and 800+ faculty members, ensuring alignment with institutional goals.
- > Implementing AI and coding platforms into the core teaching-learning process, redefining classroom experiences and enabling adaptive, skill-driven education.
- ➤ Leading innovation-oriented initiatives such as hackathons, technical exhibitions, international conferences, and entrepreneurship programs, fostering an ecosystem of real-world learning and creativity.
- ➤ Promoting faculty development programs, workshops, and technical upskilling sessions to continuously advance teaching methodologies and subject mastery.

♣ Global Collaboration & Outreach

➤ Represented India in global forums including Erasmus+ Faculty Mobility, IEEE, and PIERS

- ➤ Built academic and research collaborations with institutions in Cyprus, Prague, Melbourne, and Singapore
- Facilitated MoUs and joint research initiatives with international partners

♣ Grants & Infrastructure Development

- ➤ Successfully acquired and executed funded projects worth over ₹1.45 Cr., including the AI & ML Lab (AICTE MODROB), Design Innovation Lab (GUJCOST), and IDEA Lab (AICTE).
- ➤ Received a ₹6 lakh travel grant from the Government of India (AICTE, SERB) for international conference participation.

WORK EXPERIENCE (20+ YEARS)

Dean, Faculty of Engineering & Technology, Parul University,
Waghodia, Vadodara

Director & Principal, Noble Group of Institutions, Junagadh
Head of Department (Computer Engineering Department),
Marwadi Education Foundation Group of institutions, Rajkot

Head of Department (Computer Engineering Department), R.K.
College of Engineering and Technology, Rajkot

March 2021 to Present

June 2013 to February 2021

July 2010 to May 2013

EDUCATION

PhD in Computer Science & Engineering, Gyan Vihar University, May - 2013 Jaipur Master of Engineering in Computer Engineering July-2007 Dharmsinh Desai University, Nadiad Percentage – 60.16% **Bachelor of Engineering in Computer Engineering** May 2004 Atmiya Institute., Saurashtra University, Rajkot Percentage – 68.00% H.S.C. March 2000 Gujarat Higher Secondary Education Board. Percentage – 87.00% S.S.C. March, 1998 Gujarat Higher Secondary Education Board. Percentage – 68.00%

AWARDS & HONORS

- ♣ Received the "Inspiring Education Hero Award" from EGN India in 2025 for exceptional contribution towards the education sector.
- ♣ Contributed to Parul Institute of Engineering & Technology achieving an "AA" rating as a valuable Local Chapter based on performance in SWAYAM-NPTEL online certification courses (Jan-Apr 2025).
- ♣ Contributed to Parul Institute of Engineering & Technology achieving an "AAA" rating as a valuable Local Chapter based on performance in SWAYAM-NPTEL online certification courses (Jan-Apr 2024).
- 4 Most Resilient Administrator Parul University, October 2024
- Recognition for Educational Contribution Noble Group of Institutions, Junagadh with the "Outcome Excellence Star" award for outstanding outcome-based contribution by Parul University in 2023.

- ♣ Honoured with the "Parivar nu Ratna" (Gem of the Family) award by Shri Vekariya Parivar Welfare Trust Rajkot on March 16, 2023.
- ♣ Contributed to Parul Institute of Engineering & Technology achieving an "AA" rating as a valuable Local Chapter based on performance in SWAYAM-NPTEL online certification courses (Jul-Dec 2023).
- Uutstanding Leadership in Higher Education 2022 Ardorcomm Media, 2022
- ≠ Excellent Research Paper Award International Conference, Melbourne, Australia, 24–25 February 2020
- ≠ Pedagogical Innovation Award (PIA) Gujarat Technological University (GTU), Ahmedabad, 14 February 2015

RESEARCH EXPERIENCE

- Approved Ph.D. supervisor for computer engineering at Parul University –Vadodara.
- Approved Ph.D. supervisor for computer engineering at Gujarat Technological University Ahmedabad.
- ♣ Approved Ph.D. supervisor for computer engineering at C.U.Shah University, Wadhawan.
- 4 Approved Ph.D. supervisor for computer engineering at Rai University, Ahmedabad.

RESEARCH THESIS ASSESSED/REFERRED

- ♣ Ph.D 20
- ♣ M.Tech. 40 (For Gujarat Technological University).

STUDENTS GUIDED

- **♣** Ph.D. 04 (Awarded)
- **♣** Ph.D. 06 (Pursuing)
- ♣ M.Tech. –40 (Degree Awarded)

PROJECTS / SCHEMES SUPERVISED AS PIS FUNDED BY STATE/COUNTRY

Sr. No.	Project/ Scheme	Funded By	Fund (in Rs.)	Brief Description
1.	Idea Lab	AICTE	1.10 Cr	The AICTE IDEA (Idea Development, Evaluation & Application) Lab scheme aims to establish labs in AICTE-approved institutions to encourage students to apply their knowledge of STEM (Science, Technology, Engineering, and Mathematics).
2.	Drone Technology Lab	AICTE	50 Lacs	The AICTE is establishing Drone Technology Labs in various institutions across India. These labs, often in collaboration with companies like AVPL International and IG Drones, aim to provide hands-on training and research opportunities in drone technology, fostering a skilled workforce for the growing drone industry
3	DESIGN LAB (Research & Development	GUJCOST (Gujarat Councilof Science and Technology)	25 Lacs	Design Lab is assigned by Gujarat Council on Science and Technology (GUJCOST), Govt. of Gujarat at Noble Group of Institutions (NGI) which provides a platform for the young students with creative and innovative ideas.

	Scheme)			
4	AI & ML RESEARCH LAB (MODROB RuralScheme)	AICTE	10 Lacs	AI & ML Research Lab is assigned by AICTE, Govt. of India at NGI. The scheme equips technical institutions of rural areas with infrastructural facilities, laboratories, workshops, and computing facilities to enhance teaching, training and research capabilities.
5	Travel Grant for attending an international Conference (Australia, Singapore, Europe)	AICTE /SERB	5.0 Lacs	The purpose of this offer is to promote research and development activities in various areas of technical education by providing opportunity to meritorious faculty members to interact at International leveland update their knowledge and expertise in the concerned fields/ areas of specializations
6	Grant for International and National Conference		10 Lac	Leveraging grants such as the AICTE Grant for Organizing Conference (GOC - AICTE) for events like PICET 2023, and the Seminar and Symposia Grant (SSY – SERB) for the Scopus-indexed PICET 2024 international conference, is crucial for effectively promoting and disseminating scientific research results across India through national and international conferences, seminars, and workshops.

PUBLICATIONS

Book Published

1. A Recommender system: Social Network for Business in Scholar's Press. ISSN: 978-639-71382-4

International Publication:

- 1. Vithyalakshmi, N, Madhu, BK, Vekariya, Vipul, Shrivastava, Gitanjali,, "Wearable IoT-based Health Monitoring System with AI-Driven Alerts for Real-Time Patient Anomaly Detection", 2025 3rd International Conference on Data Science and Information System (ICDSIS), pp. 1-5, IEEE, 2025.
- 2. Goyal, Shobhit, Yadav, Rakesh Kumar, Thimmappa, Arunkumar Devalapura, Vekariya, Vipul, Bareja, Lakshay,, "Quaternion neural network types of application, benefits, and future challenges for multispectral image processing", Quaternion-Based Sparse Image Processing, pp. 217-230, Elsevier, 2025.
- 3. Chaudhary, Anisha, Alam, Intekhab, Sujai, S, Vekariya, Vipul, Gupta, Anchal,, "Collaborative and sparse representation of color image processing", Quaternion-Based Sparse Image Processing, pp. 79-94, Elsevier, 2025.
- 4. Nagappan, Beemkumar, Vekariya, Vipul, Mahajan, Vibhor,, "Quaternion cooler sparse representations for image processing-technical review", Quaternion-Based Sparse Image Processing, pp. 49-61, Elsevier, 2025.

- 5. Bhatt, Gaurav, Borisagar, Komal, Vekariya, Vipul, Dhamecha, Maulik, Soni, Sunil,, "A survey on a cross layer approaches to improve QoS of video in MANET", Digital Transformation and Sustainability of Business, pp. 328-331, CRC Press, 2025.
- 6. Vekariya, Vipul, Tadhani, Jaydeep R, Soni, Sunil J,, "Secure industrial IoT edge computing: a novel intrusion detection paradigm with deep learning", IET Conference Proceedings CP920, vol. 2025, no. 7, pp. 574–579, The Institution of Engineering and Technology Stevenage, UK, 2025.
- 7. Tadhani, Jaydeep R, Vekariya, Vipul, Lathigara, Amit, Gonsai, Atul M, "An enhanced framework for ensuring integrity of evidence in IoT attacks using blockchain and SHA-3", Digital Transformation and Sustainability of Business, pp. 116-119, CRC Press, 2025.
- 8. Shree, Lakshmi, Manjunatha, S, Vekariya, Vipul, Benal, Ganga D, Patil, Harshal,, "Efficient Optimization of Energy Consumption at Home through Machine Learning", 2024 5th International Conference on Mobile Computing and Sustainable Informatics (ICMCSI), pp. 109-114, IEEE, 2024.
- 9. Sateesh, Nayani, Kaur, Kuljeet, Lakshminarayana, M, Vekariya, Vipul, Patil, Harshal, Maranan, Ramya,, "Development of a GUI for Automated Classification of Scientific Journal Articles using clustering", 2024 5th International Conference on Innovative Trends in Information Technology (ICITIIT), pp. 1-6, IEEE, 2024.
- 10. Raja, Thandavamoorthy, Mohanavel, Vinayagam, Kannan, Sathish, Vekariya, Vipul, Paul, Dipen, Velmurugan, Palanivel, Chinnathambi, Arunachalam, Ali Alharbi, Sulaiman, Sivakumar, Subpiramaniyam,, "Rice Bran Particulates Reinforced Ipomoea Carnea Fiber Epoxy Composite for Engineering Application", Journal of Natural Fibers, vol. 21, no. 1, pp. 2364253, Taylor & Francis, 2024.
- 11. Lohumi, Yogesh, Renukalatha, S, Patil, Harshal, Maranan, Ramya, Vekariya, Vipul,, "Earlier Prognosis of Malignant Tumor in Cerebral Magnetic Resonance Images using Machine Learning", 2024 International Conference on Inventive Computation Technologies (ICICT), pp. 57-63, IEEE, 2024.
- 12. Vekariya, Vipul, Mishra, Richa, Sorathiya, Vishal, "5th Parul University International Conference on Engineering and Technology PiCET-2023", AIP Conference Proceedings, vol. 3107, no. 1, pp. 010001, AIP Publishing LLC, 2024.
- 13. Vekariya, Vipul, Mishra, Richa, Sorathiya, Vishal, "Preface: The Fifth Parul University International Conference on Engineering & Technology-PICET 2023", AIP Conference Proceedings, vol. 3107, no. 1, pp. 010002, AIP Publishing LLC, 2024.
- 14. Tadhani, Jaydeep R, Vekariya, Vipul,, "A survey of deep learning models, datasets, and applications for cyber attack detection", AIP Conference Proceedings, vol. 3107, no. 1, pp. 050012, AIP Publishing LLC, 2024.
- 15. Bhatt, Vandan, Vekariya, Vipul, Gandhi, Ankita, Patel, Anil,, "A review on hand sign recognition techniques using deep learning", AIP Conference Proceedings, vol. 3107, no. 1, pp. 050001, AIP Publishing LLC, 2024.
- 16. Sorathiya, Vishal, Soni, Umangbhai, Vekariya, Vipul, Golani, Jaysheel, Almawgani, Abdulkarem HM, Alhawari, Adam RH,, "Borophene-Ge2Sb2Te5 (GST)-based refractive index sensor: numerical study and behaviour prediction using machine learning", Plasmonics, vol. 19, no. 3, pp. 1211-1226, Springer US New York, 2024.
- 17. Suryawanshi, PB, Aswal, Upendra Singh, Merikapudi, Seshaiah, Vekariya, Vipul, Patil, Harshal, Maranan, Ramya,, "Deep Learning Approaches for Textbook Recognition and Classification",

- 2024 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS), pp. 1-6, IEEE, 2024.
- 18. Bhuvaneswari, C, Pokhariya, Hemant Singh, Yarde, Pallavi, Vekariya, Vipul, Patil, Harshal,, "Implementing AI-powered chatbots in agriculture for optimization and efficiency", 2024 2nd International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCIoT), pp. 1-7, IEEE, 2024.
- 19. Bhardwaj, Shambhu, Vekariya, Vipul, Singh, Baldev, Vinay, Sri, Arul, Alli, Roopa, Maria Daya,, "Improved healthcare monitoring of coronary heart disease patients in time-series fashion using deep learning model", Measurement: Sensors, vol. 32, pp. 101053, Elsevier, 2024.
- 20. Swathi, R, Kansal, Vipashi, Valsalan, Prajoona, Vekariya, Vipul, Taqui, Syed Noeman,, "Exploring Convolutional Neural Networks for Fingerprint Damage Detection and Classification", 2024 International Conference on Intelligent Systems for Cybersecurity (ISCS), pp. 1-6, IEEE, 2024.
- 21. Selvakumar, RB, Vivekanandan, C, Sharma, Himanshu, Vekariya, Vipul, Varma, Raj A, Mohanavel, V, Ramkumar, Govindaraj, Kumar, AS Mahesh, Abdullah-Al-Wadud, M,, "Energy management of a dual battery energy storage system for electric vehicular application", Computers and Electrical Engineering, vol. 115, pp. 109099, Pergamon, 2024.
- 22. Gupta, Sachin, Deepak, Shashikant, Bhuvana, J, Singh, Vaishali, Jindal, Kanika, Vekariya, Vipul, Chandrasekhar, Malepati, Narula, Gagandeep Singh,, "An optimized MCHVD approach to curtail handover failures in wireless networks", International Journal of Information Technology, vol. 16, no. 3, pp. 1989-1995, Springer Nature Singapore Singapore, 2024.
- 23. Tadhani, Jaydeep R, Vekariya, Vipul, Sorathiya, Vishal, Alshathri, Samah, El-Shafai, Walid,, "Securing web applications against XSS and SQLi attacks using a novel deep learning approach", Scientific Reports, vol. 14, no. 1, pp. 1803, Nature Publishing Group UK London, 2024.
- 24. Vekariya, Vipul, Joshi, Manish, Dikshit, Sukanya,, "Multi-biometric fusion for enhanced human authentication in information security", Measurement: Sensors, vol. 31, pp. 100973, Elsevier, 2024.
- 25. Kirubakaran, A Prema, Kaur, Kuljeet, Kumar, TC Santhosh, Jose, Reny, Vekariya, Vipul, Maranan, Ramya,, "AI-Enabled Visual Assistance: Detecting Doors and Stairs to Aid Individuals with Visual Impairments", 2024 5th International Conference on Innovative Trends in Information Technology (ICITIIT), pp. 1-6, IEEE, 2024.
- 26. Patel, Pranav, Vekariya, Vipul, Shah, Jaimeel, Vala, Brijesh,, "Detection of traffic sign based on YOLOv8", AIP Conference Proceedings, vol. 3107, no. 1, pp. 050015, AIP Publishing LLC, 2024.
- 27. Vala, Jaydevsinh B, Vekariya, Vipul M, Parekh, Utsav, "Detection of cyber-crimes via digital forensic artifacts: An in-depth analysis", Journal of Forensic Medicine and Toxicology, vol. 41, no. 1, pp. 97-103, Medico Legal Society, 2024.
- 28. Shelke, Atmaram Fakirba, Raman, Ramakrishnan, Vekariya, Vipul, Sivakumar, VG, GaneshBabu, TR, Srinivasan, C,, "Optimizing Urban Heat Response with IoT-Driven Manhole Heat Detection using Recurrent Neural Networks", 2024 8th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud)(I-SMAC), pp. 236-242, IEEE, 2024.
- 29. TKRK, RAO, BALAGONI, YADAIAH, VEKARIYA, VIPUL, "Cybersecurity and Artificial Intelligence for Predicting Crime Rates", J Environ Protect Ecol, vol. 25, no. 5, pp. 1395, 2024.
- 30. Patil, Harshal, Kamala, L, Chaturvedi, Arpana, Veeranjaneyulu, Rayavarapu, Vekariya, Vipul,, "Analysis of Magnetic Resonance images for the detection of Alzheimer's", 2024 4th Asian Conference on Innovation in Technology (ASIANCON), pp. 1-6, IEEE, 2024.
- 31. Dhumpati, Raghu, Nainwal, Ankita, Rekha, G Sunitha, Patil, Harshal, Vekariya, Vipul, Taqui, Syed Noeman,, "BowNetCrypt: Sleek Vaulted Messenger Secured by Bowerbird-Driven Finite Neural

- Messaging with Dual Elliptic Protection", 2024 5th International Conference on Data Intelligence and Cognitive Informatics (ICDICI), pp. 704-710, IEEE, 2024.
- 32. Vala, Jaydevsinh B, Vekariya, Vipul M, Vekariya, Vipul M,, "The Role and Importance of Digital Forensics and Digital Evidence in Cyber Crime Detection", Int J Life Sci Biotechnol Pharma Res, vol. 13, no. 6, pp. 413-420, 2024.
- 33. Raja, V Sripathi, Rawat, Ruchira, Pandit, Karuna, Dhumpati, Raghu, Vekariya, Vipul, Vijitha, S., "Automated Heart Disease Diagnosis and Monitoring System Using Similarity-Navigated Graph Neural Networks with Leopard Seal Optimization in IoT Healthcare Applications", 2024 4th International Conference on Sustainable Expert Systems (ICSES), pp. 225-230, IEEE, 2024.
- 34. Barua, Eirene, Chowhan, Santosh S, Jain, Sandeep Kumar, Vekariya, Vipul,, "A novel framework for privacy and data protection in internet of things-based energy management systems", International Journal of System Assurance Engineering and Management, pp. 1-10, Springer India, 2024.
- 35. Shaik, Nazeer, Chaudhary, Ankur, Abbineni, Srichandana, Vekariya, Vipul, Patil, Harshal, Maranan, Ramya,, "Quaternion Generative Adversarial Networks for loT based Chronic Kidney Disease Detection using Greylag Goose Optimization Algorithm", 2024 4th International Conference on Sustainable Expert Systems (ICSES), pp. 204-210, IEEE, 2024.
- 36. Deshpande, Ashish Govindrao, Raman, Ramakrishnan, Vekariya, Vipul, Mishra, Nilamadhab, Arumugam, Sundaram, Srinivasan, C., "Integrating Cloud Computing and Naive Bayes for Precision Detection and Classification of Sheet and Rill Erosion in Agriculture", 2024 2nd International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS), pp. 1367-1372, IEEE, 2024.
- 37. Raman, Ramakrishnan, Vekariya, Vipul, Gurpur, Shashikala, Narayana, KE, Murugan, S., "Realtime Road Surface Assessment through IoT Data Analysis and Random Forest", 2024 8th International Conference on Electronics, Communication and Aerospace Technology (ICECA), pp. 290-295, IEEE, 2024.
- 38. Thandavamoorthy, Raja, Mohanavel, Vinayagam, Sivapragasam, A, Vekariya, Vipul, Paul, Dipen, Velmurugan, Palanivel, Al Obaid, Sami, Alharbi, Sulaiman Ali, Basavegowda, Nagaraj,, "Environmental sustainability and waste conversion of Prosopis juliflora fibre-reinforced ZnO nanofiller particulates PLA composite-mechanical and thermal analysis", Heliyon, vol. 10, no. 19, Elsevier, 2024.
- 39. Rajeeth, TJ, Dalai, Chitaranjan, Naik, Vanitha G, Vekariya, Vipul, Kannadasan, B, Patil, Harshal,, "Safety Threat Detection in Construction Zones using Dense YOLOv8 with White Shark Nested Attention Network", 2024 8th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud)(I-SMAC), pp. 644-650, IEEE, 2024.
- 40. Sathyaraj, P, Singh, Mukesh, Umaeswari, P, AS, Mahesh Kumar, Vekariya, Vipul, Maranan, Ramya,, "Method for preserving privacy in wearable IoT devices by extending security using fog computing", 2024 OPJU International Technology Conference (OTCON) on Smart Computing for Innovation and Advancement in Industry 4.0, pp. 1-6, IEEE, 2024.
- 41. Anitha, Cuddapah, Kapruwan, Akanksha, Dange, Jyoti, Vekariya, Vipul, Maranan, Ramya,, "Improvised Text Classification by Hybrid Machine Learning Techniques", 2024 OPJU International Technology Conference (OTCON) on Smart Computing for Innovation and Advancement in Industry 4.0, pp. 1-8, IEEE, 2024.
- 42. Vekariya, Vipul, Goswami, Tanmay, Singh, Sajjan, Ghodke, Kanishka, Abdulrahman, Imad Saeed, Jain, Anshul,, "Determination of accuracy of neural network method using magnetic resonance

- images in finding liver cancer level", 2023 3rd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), pp. 702-705, IEEE, 2023.
- 43. Patel, Pranav A, Vekariya, Vipul, Shah, Jaimeel, Vala, Brijesh,, "Survey on the Effectiveness of Traffic Sign Detection and Recognition System", International Conference on Information Technology, pp. 169-187, Springer, 2023.
- 44. Vekariya, Vipul, Mishra, Richa,, "Preface: Proceedings on Smart and Sustainable Developments in Engineering and Technology", AIP Conference Proceedings, vol. 2855, no. 1, pp. 010001, AIP Publishing LLC, 2023.
- 45. Vekariya, Vipul, Mishra, Richa, "Proceedings: Smart and Sustainable Developments in Engineering and Technology", AIP Conference Proceedings, vol. 2855, no. 1, pp. 010002, AIP Publishing LLC, 2023.
- 46. Yarde, Pallavi, Bordoloi, Dibyhash, Chavan, Rahul Mohan, Vekariya, Vipul, Patil, Harshal, Natrayan, L., "A Deep Learning Neural Network-based System for Food Recognition and Calorie Estimation", 2023 3rd International Conference on Innovative Mechanisms for Industry Applications (ICIMIA), pp. 1551-1558, IEEE, 2023.
- 47. Shakeel, Mohammed, Krishnammal, P Muthu, Vekariya, Vipul, Akram, Shaik Vaseem, Kumar, Parvathapuram Pavan, Kapila, Dhiraj,, "The Design and implementation of a double layered Security Network with an Authentication System through Block chain Technology", 2023 3rd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), pp. 1469-1474, IEEE, 2023.
- 48. Jadav, Kalpesh, Sorathiya, Vishal, El-Shafai, Walid, Altameem, Torki, Aly, Moustafa H, Vekariya, Vipul, Ahmed, Kawsar, Bui, Francis M, "Shadow extraction and elimination of moving vehicles for tracking vehicles", Comput., Mater. Continua, vol. 77, no. 2, pp. 2009-2030, 2023.
- 49. Anandwani, Sujata, Vekariya, Vipul, "Devising the issues associated with artificial intelligence for mental disorders", AIP Conference Proceedings, vol. 2855, no. 1, pp. 060010, AIP Publishing LLC, 2023.
- 50. Bhalodia, Shraddha, Vekariya, Vipul, "Violence activity detection techniques—A review", AIP Conference Proceedings, vol. 2855, no. 1, pp. 060027, AIP Publishing LLC, 2023.
- 51. Mudholkar, Rachana, Cardenas-Palomino, Frans, Gehlot, Anita, Vekariya, Vipul, Raju, Adusupalle Muni, Rajput, Kapil,, "Artificial Intelligence in Maintaining Interaction Between Humans and Computer", 2023 3rd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), pp. 1903-1908, IEEE, 2023.
- 52. Vekariya, Vipul, Jadav, Kalpesh, Sorathiya, Vishal,, "High Accurate Cast Shadow Detection of Moving Vehicles in Low Illumination Environment", 2023 Photonics & Electromagnetics Research Symposium (PIERS), pp. 595-604, IEEE, 2023.
- 53. Ramachandran, KK, Ravichand, M, Joshi, Kapil, Vekariya, Vipul, Saini, Dimple, Ponnusamy, R,, "Investigation of the Educational Performance on the Revolutionary Philosophical Electoral Online Learning Platform Centred on Deep Learning", 2023 International Conference on Artificial Intelligence and Smart Communication (AISC), pp. 639-642, IEEE, 2023.
- 54. Mohan, G, Satish, G, Patil, Harshal, Vekariya, Vipul, Natrayan, L, Barve, Amit,, "AI-powered Chatbot for bridging language barriers with translation", 2023 3rd International Conference on Innovative Mechanisms for Industry Applications (ICIMIA), pp. 1559-1565, IEEE, 2023.
- 55. Vekariya, Vipul, Kumari, Alka,, "A Novel Dual Time-Point Unified Amyloid MRI/PET Data Analysis Technique", 2023 International Conference on Artificial Intelligence and Smart Communication (AISC), pp. 1411-1418, IEEE, 2023.

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- 57. Pandey, Arvind Kumar, Vekariya, Vipul,, "A Hybrid technology using Machine learning and blockchain technology to prevent Covid", 2023 International Conference on Artificial Intelligence and Smart Communication (AISC), pp. 481-484, IEEE, 2023.
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- 60. Vekariya, Vipul, Pandey, Arvind Kumar,, "Non-coherent and backscatter communications: towards ultra-massive communication in 6g wireless connections", 2023 International Conference on Artificial Intelligence and Smart Communication (AISC), pp. 1282-1285, IEEE, 2023.
- 61. Vekariya, Vipul, Rao, Raghavendra, Thakuriya, Kajal, Saxena, Kumud, Alam, Intekhab, Dandotiya, Devendra Dandotiya Devendra,, "A Paradigm Based on Big Data for Smart and Sustainable Additive Manufacturing", , 2023.
- 62. Baravaliya, Dixit, Vekariya, Vipul, Rajani, Ishan, "Detection of crop disease using optimization model in biodiverse environment", AIP Conference Proceedings, vol. 2855, no. 1, pp. 060009, AIP Publishing LLC, 2023.
- 63. Shah, Vaibhav, Modi, Manali, Singh, Gourav, Vekariya, Vipul,, "Ameliorate brain tumor detection using CNN", AIP Conference Proceedings, vol. 2855, no. 1, pp. 060028, AIP Publishing LLC, 2023.
- 64. Kumar, Ashwini, Vekariya, Vipul,, "Deep Convolutional Neural Networks for Intrusion Detection in Automotive Ethernet Networks", 2022 5th International Conference on Contemporary Computing and Informatics (IC3I), pp. 785-790, IEEE, 2022.
- 65. Thumar, Vinodray, Shah, Saurabh, Vekariya, Vipul,, "Design and Implementation of IPFS Enabled Security Framework for Multimedia Data Files", International Journal of Engineering Trends and Technology, vol. 70, no. 1, pp. 355-361, 2022.
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4 Patents

Title	Application No.	Field	Filed Date	Publication Date
A System and Apparatus for Malicious Web Traffic Discrimination Using a Deep Learning Approach	IN 202221033794	Communication	13-June-2022	July 2022
Bluetooth Based Automated Device for Controlling Home Applications Using Voice Commands for Physically Challenged People	IN 202221006388	Electronics	07-February- 2022	July 2022
Automatic Electricity Consumption Bill Generation and Energy Theft Prevention Using IoT	IN 202221006425	IoT/Energy	07-February- 2022	July 2022
Embedded Technology Based Vehicle Anti-Theft System	202221024487	Communication	26/04/2022	-
Designs and Development Of Disabled People Assistance Device Based On IOT Of Disabled People 202221024396		Biotechnology	26/04/2022	-

STTPS/WORKSHOPS/CONFERENCES ORGANIZED/WORKED AS A COORDINATOR

- ♣ One Week STTP on "Latex, Photoshop, Social Media, Word press, Google Apps & MS- Office"
- sponsored by Gujarat Technological University.
- ♣ One Week STTP on "Recent Trends in Renewable Energy Sources" sponsored by Gujarat Technological University
- Workshop on NPTEL Courses as NPTEL Single point coordinator at Noble Group of Institutions, Junagadh.
- 4 2nd National Conference on "Recent trends in Engineering, Management, Pharmacy, Architecture & Science" as a convener sponsored by GUJCOST (Gujarat Council of Science and Technology) at Noble Group of Institutions, Junagadh.
- ↓ 1st National Conference on "Recent trends in Engineering, Management, Pharmacy, Architecture & Science" as a convener sponsored by GUJCOST (Gujarat Council of Science and Technology) at Noble Group of Institutions, Junagadh.
- ♣ Information and Communication Technologies (ICT) coordinator for "Development of IT Infrastructure in campus" at Noble group of Institutions, Junagadh.

- Hands-on Training as a Resource Person on "Digital tool (Like Google Classroom, Canvas, Google Form, Kahoot, Class Dojo) for improving in Teaching learning Process".
- 🖶 "IIT Bombay Remote Center" funded by MHRD at Noble group of Institutions, Junagadh
- ♣ "Open Source Technology Club (OSTC)" associated with IIT Mumbai & GTU- Ahmedabad.
- "CISCO academy and Oracle academy" associated with CISCO and oracle.
- ♣ "NASCOVIP -2012" associated with IEEE Gujarat Section at Marwadi Education foundation, Rajkot.
- * "Mission 10x by Wipro" associated with IEEE Gujarat Section at Marwadi Education foundation, Rajkot.
- ♣ Workshop on "Object oriented programming with JAVA" associated with IEEE Gujarat Section at Marwadi Education foundation, Rajkot.
- ≠ Editorial board member on "International Conference on information, knowledge and research in engineering management & sciences" from 2011.
- ♣ Workshop on "Ethical Hacking & Cyber Security" associated with IIT Mumbai.

ATTENDED/PARTICIPATED IN STTPS / WORKSHOPS / CONFERENCES / ONLINE COURSES/RESOURCE PERSON

Academic Board in Universities

- > Board of Studies member at Dr Subhash University, Junagadh, Gujarat
- Academic board member in Rajkumar Goel Institute of Technology, Ghaziabad, Delhi NCR

Resource Person

- ➤ Invited as Keynote speaker for the 15th International Congress on Engineering, Architecture and Design, held in Istanbul, Turkey, on June 21-22, 2025.
- Invited as Keynote speaker for the Artificial Intelligence and Advanced Information Architecture (AIAIA 2025) at Amity University, 20-22 August 2025.
- ➤ Invited as Keynote speaker for the 4th International Convention on Green Environment, Technology & Entrepreneurship through Innovation (ICGETEI 2024), September 11th-13th, 2024
- ➤ Served as advisory board in "NOBCON-2024, 1st International Conference on Research & Innovation in Multidisciplinary Domains, (ICRIMD), 27 28 December, 2024

Online Courses

- ➤ "Databases and SQL for Data Science" by IBM (Coursera) April 2020.
- ➤ "Introduction to big data" by UC san diego university (Coursera) April-2020.

♣ Workshops/Seminars

- ➤ One day workshop on "Orientation for remote center coordinators" at IIT Bombay.
- > Two-week ISTE workshop on "Computer programming" at Nirma University.
- Three days' workshop on "Emerging research topic in engineering" at DAIICT Gandhinagar.
- ➤ Three days' workshop on "Data warehouse and Data Mining" at CHARUSAT Changa.

- > Two days seminar on "Computer vision and image processing" at Marwadi Education Foundation Rajkot.
- > One day workshop on "LINUX & Networking, Security" at DDIT- Nadiad.
- > State level national workshop on "Advance PHP and framework" at Christ College Rajkot.
- Two days' workshop on "Advance .Net" at C. U. Shah Engineering College, Wadhawan.
- ➤ One Month training on "Oracle Database (SQL introduction, Administration Workshop-1, Administration Workshop –II)" at Oracle Training Centre.

♣ STTPs

- > Four-week STTP on "Online use of ICT in Education for online and blended Learning" by
- > IIT Bombay.
- ➤ One-week STTP on "Mission 10x by wipro" at R.K. College of Engineering & Technology.
- Two-week STTP on "Database management system" at R.K. College of Engineering & Technology.
- ➤ One-week STTP on "Web service and service-oriented computing" at Nirma University, Ahmedabad.

National Presentation:

- ➤ "Implementation of IOT and image processing in smart Agriculture" paper presented in NCRTEMPAS (March 2017).
- > "Security threads and counter measure in data storage on mobile computing" paper presented in NCRTEMPAS (March 2017).
- ➤ "Rule extraction from neural network" paper presented in NUCON-2009 at Nirma University.
- Research paper presented in NCAC-2009 at GCET- Vallbhvidyanagar

International Presentation:

- ➤ "Finding high quality answers using multi-layer model in Community Question Answering" paper presented at International Conference on Recent Advances in Engineering and Technology at Melbourne, Australia (24th and 25th Feb, 2020).
- ➤ "A Framework for Secure Data Storage in Mobile Cloud Computing" paper presented in Springer Science+ Business Media Singapore 2016.
- ➤ "Hybrid Recommender system: survey and experiments" paper presented in International conference (DICTAP-2012) at Bangkok, Thailand.
- ➤ "MXene-GST-Graphene-Si Composited Tunable Surface Plasmon Resonance-Based Refractive Index Sensor Operated at Infrared Optical Wavelength," and "High Accurate Cast Shadow Detection of Moving Vehicles in Low Illumination Environment," presented in 2023 Photonics & Electromagnetics Research Symposium (PIERS), Prague, Czech Republic, 2023.

SHOULDERING OF ADDITIONAL RESPONSIBILITY (ADMINISTRATIVE NATURE WORK)

- Oversaw appointments, promotions, annual reviews, and managed faculty expectations.
- Lollaborated with leadership on strategic initiatives, operational priorities, and resource management (personnel, space, infrastructure).

- Chaired and managed departmental committees and organized departmental events.
- **Expanded departmental research portfolio, led new initiatives in education and scholarship, and approved new educational offerings.**
- ♣ Managed program admissions, identified student funding, and monitored student progress.
- Lultivated external professional contacts, developed lifelong learning opportunities, and created faculty/student development resources.
- Handled core administrative tasks and prepared award nominations.

RESPONSIBLE FOR COMMENCEMENT OF START-UPS

4 Techtotes Club

- > Founded and led the Techtotes student club, a community hub for technology enthusiasts, for over four years.
- > Fostered a vibrant learning environment with the motto "Learn with Fun" and "Dive into Technology," connecting students with alumni and professionals in various tech fields.
- > Spearheaded a digital literacy initiative to provide digital technology awareness and education to individuals in rural areas.
- > Received the prestigious GISC award for I-SCALE Innovation from GTU in recognition of the club's startup initiative.

Hacking Spot Club

- > Co-founded and directed the Hacking Spot Club to provide essential cybersecurity knowledge and ethical hacking techniques to students, addressing a critical gap in the university's curriculum.
- > Developed and delivered free workshops focused on proactive security, teaching students how to protect themselves from common hacking threats.
- > Educated members on critical topics, including social media safety, different types of hacking techniques, and the roles of various hacking communities worldwide.
- > Guided and mentored students on the path to becoming ethical hackers, emphasizing the importance of staying "aware and secure."

INVOLVEMENT AS RESOURCE PERSONS IN VARIOUS SCHEMES

Sr No	Scheme	Organization	Brief Description
1.	Online Courses & Certification	NPTEL (National Program on Technology Enhanced Learning)	Lottered twice a year (lan-liin liil-Dec) loining a course is l
2.	Remote Center	IIT (Indian Institutes of Technology) Bombay	Noble Group of Institutions takes pride to be the selected as the first Remote Centre of IIT Bombay for their E-outreach programme in Junagadh Region. With this initiative, IIT Mumbai aims to enhance the teaching skills of faculty members in engineering and science, of its member colleges through what is termed "Empowerment of students and teachers through Synchronous and Asynchronous Instruction".

3.	Open Source Technology Club	IIT-Bombay& GTU-Ahmedabad	Noble Group of Institutions, Junagadh has set up a
			milestone and established Open Source Technologies Club
			(OSTC) for providing as well as utilizing benefits of latest
			free and open source technologies under guideline of Gujarat
			Technological University.
	Networking Academy	CISCO	Noble Group of Institutions has partnership with CISCO for
			"Cisco Network Academy". Cisco Networking Academy
4.			trains the students how to design, build, troubleshoot, and
			secure computernetworks for increased access to Computer
			Network & Telecommunication Sector. Networking
			Academy provides online courses, interactive tools, and
			hands-on learning activities to help individuals prepare for
			ICT and networking careers in virtually every type of
			industry.
5.	Oracle Academy	Oracle	Noble Group of Institutions has been admitted as
			Institutional Member of Oracle Academy, an organization
			that seeks to advance computer science education globally
			to drive knowledge, innovation, skills development, and
			diversity in technology fields.

CONTRIBUTIONS TO COMMUNITY

- **Swachh Bharat Abhiyan:** Directed a comprehensive cleanliness and environmental awareness program in the Girnar forest, Junagadh city, and surrounding rural areas.
- → **Digital Payment Awareness:** Led a team of faculty and students to educate rural communities in Junagadh district on digital payments, online banking, and e-governance. This also included training students for industry and hackathons.
- **Joy of Giving Social Activity:** Initiated a National Service Scheme (NSS) project where students collected and distributed clothing and food to poor and needy people across 15 slum areas.
- **♣ Blood Donation Camp:** Organized a successful blood donation camp annually for four consecutive years.
- **Rakshabandhan Celebration:** Coordinated the creation of handmade rakhis and presented them to over 380 police officers and trainees, honoring their service and acknowledging their sacrifice of being away from home. This initiative has been carried out for the last three years.
- **Women's Day Celebration:** Managed an event focused on women's empowerment, inviting legal experts to provide awareness on women's rights and a karate champion to teach self-defense techniques.

PERSONAL INTEREST

Event Management | Music | Movies | Leadership | Playing Cricket | listening Music | Reading

PERSONAL DETAILS

🖶 Father's Name: Manasukhbhai Vekariya

Marital Status: MarriedNationality: Indian

🖶 Address: Block No -13, "Shri-Darshan", Keshav Residency, Near Astha Residency, 150 Ft. Ring Road, Rajkot -360004

REFERENCES

Prof. (Dr.)T. G. Sitharam

Dr Akhilesh Gupta Former secretary - SERB,

Chairman, All India Council for Technical Education (AICTE) New Delhi. (former Director, Indian Institute of Technology Guwahati)

Sr Consultant INSA Adviser & Distinguished Visiting Professor IIT Roorkee, Chairman R&D Board, IIT Ropar,

Mobile No: +91 - 98104 22249

Mobile No:

DECLARATION

I, Vipul Vekariya, hereby declare that the information contained herein is true and correct to the best f my knowledge and belief.

Date: 02/08/2025 Place: Vadodara

J.m. Venarium