

Narayan Vyas

Assistant Professor

+91(CC) 856 001 4421 narayanvyas87@gmail.com 🏠 Bhilwara, India

[in/narayanvyas87](#) [github.com/narayanvyas](#) [www.narayanvyas.com](#)

Summary

Driven by a profound understanding of the Internet of Things and mobile and web Application Development, I am dedicated to pursuing a career in academia, leveraging my expertise to impart students with highly sought-after skills relevant to the industry. I qualified for the **NTA UGC NET & JRF** examination on my first attempt. I have worked with 50+ clients worldwide for projects related to Mobile Application Development with Flutter. Currently, I am working on 2 large-scale projects for clients from Australia and the USA. I have numerous publications in esteemed, peer-reviewed international Scopus journals and conferences that mark contributions to the academic community. Moreover, I have been honored to serve as a keynote speaker and resource person, delivering impactful workshops and webinars across various locations in India. My research pursuits encompass various cutting-edge domains, including Remote Sensing, the Internet of Things, Machine Learning, Deep Learning, Computer Vision, and agriculture Enhancement.

Areas of Expertise

Remote Sensing - Internet of Things - Mobile Application Development - Android & iOS Deployment - Front End Development - Industrial Training

Weblinks

- Scopus: [57221967474](#) (H-Index: 10)
- ORCID: [0000-0003-4225-0764](#)
- Vidwan: [526462](#)
- Web of Science ResearcherID: [IUQ-5540-2023](#)
- Google Scholar: [aFSlhMoAAAAJ](#)
- Semantic Scholar: [107727548](#)

Professional Experience

Assistant Professor [Vivekananda Global University \(NAAC A+\)](#) Jaipur, India 06/2024 - present

- Serving as the Research Coordinator for the Department of Computer Science & Applications, overseeing all research-related initiatives and activities.
- Leading the design and development of the departmental syllabus, ensuring alignment with current academic and industry standards.
- Mentoring students in research methodologies and guiding them in producing high-quality research publications.
- Collaborating with faculty members to integrate innovative teaching techniques and research findings into the curriculum.
- Organizing and conducting workshops and seminars to enhance the research capabilities of both students and faculty.
- Actively participating in departmental meetings and contributing to strategic planning and decision-making processes.
- Working towards the establishment of an advanced remote sensing-based lab for environmental studies for students, faculty members, and researchers.
- Tasked with designing the syllabus according to NEP 2020 guidelines, integrating modern educational frameworks and interdisciplinary approaches.

Technical Trainer *Chandigarh University (NAAC A+)***Mohali, India** 02/2023 - 06/2024

- Reporting to Additional Director of University Institute of Engineering, Department of Computer Science & Engineering, Chandigarh University.
- Worked as a Founding Member of the Student Research Cell at the University Level, managing to provide a significant number of quality research with student collaborations.
- Offering students hands-on experience in Mobile App Development, the Internet of Things (IoT), and Full Stack Development, including Mobile Application Development with Flutter & Firebase.
- Conducting workshops & seminars on Research & Development extensively for engineering students.
- Worked as a mentor for SIH-2023.
- Part of Special Research Team to conduct ground-level research for IoT projects for the Uttarakhand Government.

Principal Research Consultant *AVN Innovations Pvt. Ltd.***Ajmer, India** 05/2023 - present

- Led and managed research projects from initiation to completion, ensuring timely and high-quality deliverables.
- Provided mentorship and guidance to junior researchers, fostering a collaborative and innovative research environment.
- Prepared research manuscripts, including writing and editing scientific content, adhering to publication guidelines and standards.
- Worked closely with co-authors to ensure collaborative and cohesive publication efforts.

Sr. Mobile App Developer *Flexxited***Bangalore, India** 05/2020 - 02/2023

- Developed and published mobile apps and web apps for clients using Flutter on iOS & Android.
- Managed day-to-day responsibilities of handling mobile app projects for the industry.
- Employed full-stack development tools to produce holistically envisioned applications.
- Collaborated across multi-disciplinary teams using Agile development frameworks.

Flutter Mobile App Development Trainer *TeacherOn***USA** 07/2021 - present

- Taught Flutter for Cross-Platform mobile app development to various students worldwide.
- Guided course projects to university students based in the USA, UAE, etc.
- Worked flexible hours across nights, weekends, and holiday shifts.

Freelance Mobile App Developer *Fiverr***USA** 05/2021 - present

- Resolved problems, improved operations, and provided exceptional service.
- Led projects and analyzed data to identify opportunities for improvement.
- Trained people for mobile app development.

Front End Web Developer *Media City***Bhilwara, India** 05/2017 - 06/2018

- Designed Bootstrap-based responsive themes for various international marketplaces like ThemeForest.
- Converted mockups into usable web presence with HTML, JavaScript, AJAX, and JSON coding.

Education

Ph.D Computer Science (Pursuing) *Punjabi University (NAAC A+)***Patiala, India** 09/2023 - present

Working on Image Fusion Based Framework for Monitoring Agricultural Variations Using Satellite Images under the guidance of Dr. Ganesh Kumar Sethi (Associate Professor, Multani Mal Modi College, Patiala, India) and Dr. Sartajvir Singh (Associate Director & Professor, University Institute of Engineering, Chandigarh University).

NTA UGC NET & JRF *University Grants Commission***Delhi, India** 11/2022 - present

Cleared NTA UGC NET & JRF in Computer Science & Application on the first attempt.

Masters in Computer Application *Maharshi Dayanand Saraswati University* **Ajmer, India** 08/2019 - 06/2022

Completed MCA from the Department of Computer Science, School of Engineering & System Sciences. Achieved first rank in the class.

Bachelors in Computer Applications *Maharshi Dayanand Saraswati University* **Ajmer, India** 07/2016 - 08/2019

Completed BCA from Swift College, Bhilwara with a specialization in the Internet of Things. The major project involved creating a Self-Balancing Robot.

Edited Books

Geospatial Intelligence in Precision Agriculture: Sustainable Practices, Technologies and Business Models 06/2024

[Scrivener Publishing LLC \(Wiley\)](#) Edited Book by Scrivener Publishing LLC - Wiley (In Production)

IoT and Remote Sensing Technologies for Precision Agriculture 06/2024

[Apple Academic Press](#)

Edited Book by Apple Academic Press (In Production)

RADAR Remote Sensing Data Analysis with Artificial Intelligence 05/2024

[De Gruyter](#)

Edited Book by De Gruyter (In Production)

Applying Machine Learning Techniques to Bioinformatics: Few-Shot and Zero-Shot Methods 03/2024

[IGI Global](#)

U. K. Lilhore, A. Kumar, S. Simaiya, **N. Vyas**, and V. Dutt, Eds., "Applying Machine Learning Techniques to Bioinformatics," *Advances in Bioinformatics and Biomedical Engineering*. IGI Global, Apr. 05, 2024. doi: [10.4018/979-8-3693-1822-5](https://doi.org/10.4018/979-8-3693-1822-5).

Innovations in Machine Learning and IoT for Water Management 11/2023

[IGI Global](#)

A. Kumar, A. L. Srivastav, A. K. Dubey, V. Dutt, and **N. Vyas**, Eds., "Innovations in Machine Learning and IoT for Water Management," *Advances in Civil and Industrial Engineering*. IGI Global, Nov. 27, 2023. doi: [10.4018/979-8-3693-1194-3](https://doi.org/10.4018/979-8-3693-1194-3).

Quantum Innovations at the Nexus of Biomedical Intelligence 11/2023

[IGI Global](#)

V. Dutt, A. Kumar, S. Ahuja, A. Baliyan, and **N. Vyas**, Eds., "Quantum Innovations at the Nexus of Biomedical Intelligence," *Advances in Bioinformatics and Biomedical Engineering*. IGI Global, Dec. 29, 2023. doi: [10.4018/979-8-3693-1479-1](https://doi.org/10.4018/979-8-3693-1479-1).

AI-Driven Alzheimer's Disease Detection and Prediction 01/2024

[IGI Global](#)

U. K. Lilhore, A. Anand, A. Kumar, S. P. Yadav, and N. Vyas, Eds., "AI-Driven Alzheimer's Disease Detection and Prediction," *Advances in Medical Technologies and Clinical Practice*. IGI Global, Jun. 28, 2024. doi: [10.4018/979-8-3693-3605-2](https://doi.org/10.4018/979-8-3693-3605-2).

Secure Energy Optimization: Leveraging IoT and AI for Enhanced Efficiency 10/2023

[Scrivener Publishing LLC \(Wiley\)](#)

Edited Book by Scrivener Publishing LLC - Wiley (In Production)

Internet of Medicine for Smart Healthcare 09/2023

[Scrivener Publishing LLC \(Wiley\)](#)

Multimodal Data Fusion for Bioinformatics AI

09/2023

Scrivener Publishing LLC (Wiley)

Edited Book by Scrivener Publishing LLC - Wiley (In Production)

Quantum Machine Learning - Quantum Algorithms and Neural Networks

06/2023

De Gruyter, Germany

P. Raj, H. H. Song, D.-N. Le, and N. Vyas, Eds., "Quantum Machine Learning." De Gruyter, Jul. 04, 2024. doi: [10.1515/9783111342276](https://doi.org/10.1515/9783111342276).

Publications

Advancing Precision Agriculture: Leveraging YOLOv8 for Robust Deep Learning Enabled Crop Diseases Detection

11/2023

N. Vyas and V. Dutt, "Advancing Precision Agriculture: Leveraging YOLOv8 for Robust Deep Learning Enabled Crop Diseases Detection," 2023 International Conference on Integration of Computational Intelligent System (ICICIS), Pune, India, 2023, pp. 1-6, doi: [10.1109/ICICIS56802.2023.10430280](https://doi.org/10.1109/ICICIS56802.2023.10430280).

Genetic Algorithm-Driven Hyperparameter Optimization of Capsule Networks for Predictive Analysis of Genetic Mutations

11/2023

N. Vyas, V. C. Patil, V. Desai Jabbar and Anurag, "Genetic Algorithm-Driven Hyperparameter Optimization of Capsule Networks for Predictive Analysis of Genetic Mutations," 2023 Seventh International Conference on Image Information Processing (ICIIP), Solan, India, 2023, pp. 616-621, doi: [10.1109/ICIIP61524.2023.10537665](https://doi.org/10.1109/ICIIP61524.2023.10537665).

Hybrid Convolutional-Recurrent Neural Network Architecture with Attention Mechanisms for Multi-modal Medical Image Segmentation

11/2023

N. Vyas, A. Gudur, A. I. Tamboli and Anurag, "Hybrid Convolutional-Recurrent Neural Network Architecture with Attention Mechanisms for Multi-modal Medical Image Segmentation," 2023 Seventh International Conference on Image Information Processing (ICIIP), Solan, India, 2023, pp. 622-627, doi: [10.1109/ICIIP61524.2023.10537765](https://doi.org/10.1109/ICIIP61524.2023.10537765).

Distributed Deep Reinforcement Learning with Graph Neural Networks for Personalized Drug Interaction Analysis

11/2023

N. Vyas, N. N. Jadhav, V. V. Raje and C. Choudhary, "Distributed Deep Reinforcement Learning with Graph Neural Networks for Personalized Drug Interaction Analysis," 2023 Seventh International Conference on Image Information Processing (ICIIP), Solan, India, 2023, pp. 610-615, doi: [10.1109/ICIIP61524.2023.10537643](https://doi.org/10.1109/ICIIP61524.2023.10537643).

Exploring the Critical Role of Edge Computing in Enhancing IoT Performance and Security

11/2023

Anurag, C. Choudhary and **N. Vyas**, "Exploring the Critical Role of Edge Computing in Enhancing IoT Performance and Security," 2023 International Conference on Communication, Security and Artificial Intelligence (ICCSAI), Greater Noida, India, 2023, pp. 563-568, doi: [10.1109/ICCSAI59793.2023.10421138](https://doi.org/10.1109/ICCSAI59793.2023.10421138).

An Optimized Sign Language Recognition using Convolutional Neural Networks (CNNs) and TensorFlow

11/2023

C. Choudhary, **N. Vyas** and U. K. Lilhore, "An Optimized Sign Language Recognition Using Convolutional Neural Networks (CNNs) and TensorFlow," 2023rd International Conference on Technological Advancements in Computational Sciences (ICTACS), Tashkent, Uzbekistan, 2023, pp. 896-901, doi: [10.1109/ICTACS59847.2023.10390276](https://doi.org/10.1109/ICTACS59847.2023.10390276).

Detecting Seizures from EEG Data: The Potential of Deep Learning Techniques

11/2023

Mamta, M. B. Mane, **N. Vyas** and A. Baliyan, "Detecting Seizures from EEG Data: The Potential of Deep Learning Techniques," 2023rd International Conference on Technological Advancements in Computational Sciences (ICTACS), Tashkent, Uzbekistan, 2023, pp. 439-444, doi: [10.1109/ICTACS59847.2023.10390369](https://doi.org/10.1109/ICTACS59847.2023.10390369).

Cloud Security: Challenges and Strategies for Ensuring Data Protection 11/2023

C. Choudhary, **N. Vyas** and U. Kumar Lilhore, "Cloud Security: Challenges and Strategies for Ensuring Data Protection," 2023rd International Conference on Technological Advancements in Computational Sciences (ICTACS), Tashkent, Uzbekistan, 2023, pp. 669-673, doi: [10.1109/ICTACS59847.2023.10390302](https://doi.org/10.1109/ICTACS59847.2023.10390302).

The Impact of Air Pollution on Respiratory Health Results: An Analysis of Asthma and COPD in a Population Study 11/2023

N. Vyas, P. A. P., P. Das and Y. Mahajan, "The Impact of Air Pollution on Respiratory Health Results: An Analysis of Asthma and COPD in a Population Study," 2023 International Conference on Computing, Communication, and Intelligent Systems (ICCCIS), Greater Noida, India, 2023, pp. 141-146, doi: [10.1109/ICCCIS60361.2023.10425187](https://doi.org/10.1109/ICCCIS60361.2023.10425187).

Transforming Work: The Impact of Artificial Intelligence (AI) On Modern Workplace 11/2023

Anurag, **N. Vyas** and U. Kumar Lilhore, "Transforming Work: The Impact of Artificial Intelligence (AI) on Modern Workplace," 2023rd International Conference on Technological Advancements in Computational Sciences (ICTACS), Tashkent, Uzbekistan, 2023, pp. 602-607, doi: [10.1109/ICTACS59847.2023.10390258](https://doi.org/10.1109/ICTACS59847.2023.10390258).

Deepfake Detection Using CNN And DCGANS To Drop-Out Fake Multimedia Content: A Hybrid Approach 10/2023

K. Bansal, S. Agarwal and **N. Vyas**, "Deepfake Detection Using CNN and DCGANS to Drop-Out Fake Multimedia Content: A Hybrid Approach," 2023 International Conference on IoT, Communication and Automation Technology (ICICAT), Gorakhpur, India, 2023, pp. 1-6, doi: [10.1109/ICICAT57735.2023.10263628](https://doi.org/10.1109/ICICAT57735.2023.10263628).

Personalized Cardiovascular Disease Risk Prediction using Random Forest: An Optimized Approach 10/2023

V. R. Burugadda, V. Dutt, Mamta and **N. Vyas**, "Personalized Cardiovascular Disease Risk Prediction Using Random Forest: An Optimized Approach," 2023 IEEE World Conference on Applied Intelligence and Computing (AIC), Sonbhadra, India, 2023, pp. 226-232, doi: [10.1109/AIC57670.2023.10263915](https://doi.org/10.1109/AIC57670.2023.10263915).

Real-Time Traffic Analysis and Driver Safety Enhancement via IoT and Computer Vision with High-Resolution Project Lamps for Intelligent Road Illumination 09/2023

H. Dhiman, **N. Vyas**, A. Pagrotra and V. Dutt, "Real-Time Traffic Analysis and Driver Safety Enhancement via IoT and Computer Vision with High-Resolution Project Lamps for Intelligent Road Illumination," 2023st International Conference on Circuits, Power and Intelligent Systems (CCPIS), Bhubaneswar, India, 2023, pp. 01-06, doi: [10.1109/CCPIS59145.2023.10291872](https://doi.org/10.1109/CCPIS59145.2023.10291872).

Design and Evaluation of a Nanotechnology-Based Drug Delivery System for Enhanced Efficacy and Safety in Cancer Treatment 09/2023

V. R. Burugadda, A. Guddur, N. Vyas, and A. Pokhriyal, "Design and Evaluation of a Nanotechnology-Based Drug Delivery System for Enhanced Efficacy and Safety in Cancer Treatment," 2023 IEEE Fifth International Conference on Advances in Electronics, Computers and Communications (ICAIECC), Bengaluru, India, 2023, pp. 01-06, doi: [10.1109/ICAIECC59324.2023.10560299](https://doi.org/10.1109/ICAIECC59324.2023.10560299).

Artificial Intelligence Based Fire and Smoke Detection and Security Control System 09/2023

H. Prasad, A. Singh, J. Thakur, C. Choudhary and **N. Vyas**, "Artificial Intelligence Based Fire and Smoke Detection and Security Control System," 2023 International Conference on Network, Multimedia and Information Technology (NMITCON), Bengaluru, India, 2023, pp. 01-06, doi: [10.1109/NMITCON58196.2023.10276198](https://doi.org/10.1109/NMITCON58196.2023.10276198).

Healthcare in the Aftermath of COVID-19: Charting a Course for the Future 09/2023

B. Sharma and **N. Vyas**, "Healthcare in the Aftermath of COVID-19: Charting a Course for the Future," 2023 International Conference on Circuit Power and Computing Technologies (ICCPCT), Kollam, India, 2023, pp. 1280-1285, doi: [10.1109/ICCPCT58313.2023.10244828](https://doi.org/10.1109/ICCPCT58313.2023.10244828)

Deep Learning-Based Automatic Face Expression Recognition Framework 09/2023

Akanksha, K. Ranjan and **N. Vyas**, "Deep Learning-Based Automatic Face Expression Recognition Framework," 2023 International Conference on Circuit Power and Computing Technologies (ICCPCT), Kollam, India, 2023, pp. 1291-1296, doi: [10.1109/ICCPCT58313.2023.10245885](https://doi.org/10.1109/ICCPCT58313.2023.10245885).

Multimodal Neuroimaging Data in Early Detection of Alzheimer's Disease - Exploring the Role of Ensemble Models and GAN Algorithm 09/2023

U. S. Sekhar, **N. Vyas**, V. Dutt and A. Kumar, "Multimodal Neuroimaging Data in Early Detection of Alzheimer's Disease: Exploring the Role of Ensemble Models and GAN Algorithm," 2023 International Conference on Circuit Power and Computing Technologies (ICCPCT), Kollam, India, 2023, pp. 1664-1669, doi: [10.1109/ICCPCT58313.2023.10245177](https://doi.org/10.1109/ICCPCT58313.2023.10245177).

Enhancing Breast Cancer Diagnosis: A Deep Belief Network Approach for Mammography Image Analysis 09/2023

V. R. Burugadda, V. C. Patil, **N. Vyas** and A. Pokhriyal, "Enhancing Breast Cancer Diagnosis: A Deep Belief Network Approach for Mammography Image Analysis," 2023 International Conference on Advances in Computation, Communication and Information Technology (ICAICCIT), Faridabad, India, 2023, pp. 46-51, doi: [10.1109/ICAICCIT60255.2023.10465784](https://doi.org/10.1109/ICAICCIT60255.2023.10465784).

A Machine Learning Framework for Accurate Prediction of Parkinson's Disease from Speech Data 09/2023

S. R. Burri, D. K. Agarwal, **N. Vyas** and R. Duggar, "A Machine Learning Framework for Accurate Prediction of Parkinson's Disease from Speech Data," 2023rd International Conference on Innovative Sustainable Computational Technologies (CISCT), Dehradun, India, 2023, pp. 1-6, doi: [10.1109/CISCT57197.2023.10351422](https://doi.org/10.1109/CISCT57197.2023.10351422).

Chronic Kidney Disease Prediction Using Robust Approach in Machine Learning 09/2023

Anurag, **N. Vyas**, V. Sharma and D. Balla, "Chronic Kidney Disease Prediction Using Robust Approach in Machine Learning," 2023rd International Conference on Innovative Sustainable Computational Technologies (CISCT), Dehradun, India, 2023, pp. 1-5, doi: [10.1109/CISCT57197.2023.10351277](https://doi.org/10.1109/CISCT57197.2023.10351277).

Exploring the Potential of Deep Reinforcement Learning for Autonomous Navigation in Complex Environments 08/2023

V. R. Burugadda, N. Jadhav, **N. Vyas** and R. Duggar, "Exploring the Potential of Deep Reinforcement Learning for Autonomous Navigation in Complex Environments," 2023 7th International Conference On Computing, Communication, Control And Automation (ICCUBEA), Pune, India, 2023, pp. 1-6, doi: [10.1109/ICCUBEA58933.2023.10392109](https://doi.org/10.1109/ICCUBEA58933.2023.10392109).

Enhancing Land-Based Robotics through the Development of Remotely Operated Vehicles for Military, Rescue and Industrial Applications 08/2023

V. R. Burugadda, **N. Vyas** and A. Pagrotra, "Enhancing Land-Based Robotics through the Development of Remotely Operated Vehicles for Military, Rescue and Industrial Applications," 2023 3rd Asian Conference on Innovation in Technology (ASIANCON), Ravet IN, India, 2023, pp. 1-6, doi: [10.1109/ASIANCON58793.2023.10270756](https://doi.org/10.1109/ASIANCON58793.2023.10270756).

Optimizing Irrigation Efficiency with IoT and Machine Learning: A Transfer Learning Approach for Accurate Soil Moisture Prediction 07/2023

S. R. Burri, D. K. Agarwal, **N. Vyas** and R. Duggar, "Optimizing Irrigation Efficiency with IoT and Machine Learning: A Transfer Learning Approach for Accurate Soil Moisture Prediction," 2023 World Conference on Communication & Computing (WCONF), Raipur, India, 2023, pp. 1-6, doi: [10.1109/WCONF58270.2023.10235220](https://doi.org/10.1109/WCONF58270.2023.10235220).

The Convergence Of Cutting-Edge Technologies: Leveraging AI and Edge Computing to Transform the Internet of Medical Things (IoMT) 07/2023

R. Punugoti, **N. Vyas**, A. T. Siddiqui and A. Basit, "The Convergence of Cutting-Edge Technologies: Leveraging AI and Edge Computing to Transform the Internet of Medical Things (IoMT)," 2023 4th International Conference on Electronics and Sustainable Communication Systems (ICESC), Coimbatore, India, 2023, pp. 600-606, doi: [10.1109/ICESC57686.2023.10193047](https://doi.org/10.1109/ICESC57686.2023.10193047).

A Novel Approach for Anomaly Detection in the Time-Series Data using Generative Adversarial Networks 05/2023

R. Raturi, A. Kumar, **N. Vyas** and V. Dutt, "A Novel Approach for Anomaly Detection in Time-Series Data using

Generative Adversarial Networks," 2023 International Conference on Sustainable Computing and Smart Systems (ICSCSS), Coimbatore, India, 2023, pp. 1352-1357, doi: [10.1109/ICSCSS57650.2023.10169365](https://doi.org/10.1109/ICSCSS57650.2023.10169365).

Fuzzy KNN Implementation for Early Parkinson's Disease Prediction

02/2023

S. Chandrasekaran, V. Dutt, **N. Vyas** and A. Anand, "Fuzzy KNN Implementation for Early Parkinson's Disease Prediction," 2023 7th International Conference on Computing Methodologies and Communication (ICCMC), Erode, India, 2023, pp. 896-901, doi: [10.1109/ICCMC56507.2023.10083522](https://doi.org/10.1109/ICCMC56507.2023.10083522).

Student Sentiment Analysis Using Various Machine Learning Techniques

01/2023

S. Chandrasekaran, V. Dutt, **N. Vyas**, and R. Kumar, "Student Sentiment Analysis Using Various Machine Learning Techniques," 2023 International Conference on Artificial Intelligence and Smart Communication (AISC). IEEE, Jan. 27, 2023. doi: [10.1109/aisc56616.2023.10085018](https://doi.org/10.1109/aisc56616.2023.10085018).

Improved Healthcare System with Quantum Computing

01/2023

S. Chandrasekaran, R. Agrawal, V. Dutt, and **N. Vyas**, "Improved Healthcare System with Quantum Computing," 2023 International Conference on Artificial Intelligence and Smart Communication (AISC). IEEE, Jan. 27, 2023. doi: [10.1109/aisc56616.2023.10085380](https://doi.org/10.1109/aisc56616.2023.10085380).

RFID Based Attendance Monitoring System Using ESP8266 Wi-Fi Module and IoT Enabled Mobile Application

09/2022

H. Krishna and **N. Vyas**, "RFID Based Attendance Monitoring System Using ESP8266 Wi-Fi Module and IoT Enabled Mobile Application," Neural Computing and Applications, vol. 34, no. 9, pp. 2907-2916, 2022, doi: [10.14704/nq.2022.20.9.NQ44681](https://doi.org/10.14704/nq.2022.20.9.NQ44681).

Big Data Approach for Medical Data Classification: A Review Study

12/2020

S. Boyapati, S. R. Swarna, V. Dutt, and **N. Vyas**, "Big Data Approach for Medical Data Classification: A Review Study," 2020rd International Conference on Intelligent Sustainable Systems (ICISS). IEEE, Dec. 03, 2020. doi: [10.1109/iciss49785.2020.9315870](https://doi.org/10.1109/iciss49785.2020.9315870).

Book Chapters

Elevating IoT Sensor Data Management and Security Through Blockchain Solutions

03/2024

N. Bhati and **N. Vyas**, "Elevating IoT Sensor Data Management and Security Through Blockchain Solutions," Advances in Systems Analysis, Software Engineering, and High Performance Computing. IGI Global, pp. 58-77, Mar. 18, 2024. doi: [10.4018/979-8-3693-0968-1.ch003](https://doi.org/10.4018/979-8-3693-0968-1.ch003).

Advanced Real-Time Simulation Framework for the Physical Interaction Dynamics of Production Lines Leveraging Digital Twin Paradigms

03/2024

N. Bhati, **N. Vyas**, V. Dutt, R. Duggar, and A. Pokhriyal "Advanced Real-Time Simulation Framework for the Physical Interaction Dynamics of Production Lines Leveraging Digital Twin Paradigms. Wiley, pp. 319-343, May. 30, 2024. doi: [10.1002/9781394257003.ch15](https://doi.org/10.1002/9781394257003.ch15).

Awards & Honours

International Distinguished Young Researcher Award

08/2024

Received the International Distinguished Young Researcher Award from ASET Journal of Management Science.

Session Chair at 1st International Conference on Artificial Intelligence for Innovations in Healthcare Industries (ICAIHI-2023)

01/2024

Served as a Session Chair at 1st International Conference on Artificial Intelligence for Innovations in Healthcare Industries (ICAIHI-2023).

Reviewer for AICTE Sponsored IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON-2023) 09/2023

Served as a reviewer for AICTE Sponsored IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON) organized at Nitte Meenakshi Institute of Technology, Bengaluru INDIA during 1st and 2nd September 2023 in association with IEEE Bangalore Section.

Reviewer for 1st International Conference on Data Science and Network Security (ICDSNS-2023) 09/2023

Served as a reviewer for 1st International Conference on Data Science and Network Security organized at Kalpataru Institute of Technology, Tiptur, Karnataka, India on 26 and 27 July 2023.

Proctor of Competing Teams for IEEEExtreme (IEEEExtreme 17.0) 08/2023

Volunteered as a proctor to guide and oversee competing teams for the IEEEExtreme 17.0 programming competition that hosted +17,000 participants.

Workshop on Mobile App Development with Flutter at SSN College of Engineering, Anna University 08/2021

Conducted a workshop on Flutter cross-platform mobile application development for Engineering Students. Students learned hands-on projects of mobile application development, with Flutter & Google Firebase.

Faculty Development Program (FDP) on Internet of Things at Chitkara University 12/2019

Conducted a two-day faculty development program at Chitkara University on the Internet of Things.

Internet of Things (IoT) Workshop at Shri Padampat Singhania University, Udaipur 12/2019

Conducted workshop on Internet of Things, and Mobile App Development for B.Tech, M.Tech & Ph.D Scholars.

Projects

EarCapture Medical Patient Record Management App

Android & iOS application to manage crucial patient details for a USA-based client using Cliniko API.

Kwizzle Mobile App for Android & iOS

A mobile app for sophisticated kwizes, made for Android & iOS.

TakeMyPark Mobile App for Android & iOS

The complete parking solution app is currently being tested and used in Australia. Designed in Flutter, with Firebase as a backend.

Water Quality Management System With IoT

Developed a comprehensive Water Quality Management System leveraging IoT and ML technology, encompassing the design and development of a mobile application and hardware components, including PCB, enabling real-time monitoring and analysis of water quality parameters.

IoT based Smart Agriculture Land Monitoring System with LoRa

Designed and implemented an IoT-based Smart Agriculture Land Monitoring System utilizing LoRa technology for efficient remote monitoring and management of agricultural land conditions.

Mobile App For Electric Vehicle Controller (Using Bluetooth Low Energy)

Create a Cross Platform Mobile App for the controller of electric vehicles, which uses Bluetooth Low Energy to configure parameters and to get real-time vehicle data.

ESP8266 Mobile App Interconnection With Google Cloud Function, FirebaseRealtime Database

Integrated ESP8266 WiFi module with Flutter-based Mobile application.

WiFi Based Weather Station System

Created WiFi-based weather station based on NodeMCU ESP8266 module, data communication was done with MQTT protocol and REST APIs

Intruder Alarm System with Arduino

Created intruder alarm system with Arduino.

Self Balancing Robot

Developed a self-balancing robot using Arduino, NodeMCU integrated with gyroscope sensors, and WiFi module.

LoRa Wireless Communication Device

Created LoRa LoRa-based wireless communication device which can transmit data over a long range.

Ecommerce App Development With Flutter

Created highly scalable eCommerce application with Flutter.

Attendance Manager Device With Mobile App

Created a device which captures attendance of the user with Fingerprint sensors, transmits data to Firebase NoSQL database, and can be managed by Mobile Application

KickStarter Project Funding Software on Ethereum Blockchain

This project used Ethereum and React to handle the transactions. The Smart Contract is made in Solidity language and hosted on the Ethereum blockchain.

Dominium Document Verifi cation App

Created a document verification app that works on Android, iOS & Web using Flutter.

UFit Trainer App

Developed an application for fitness trainers which tracks a person's activities, gives customized diet plans, etc.

Jamestry Job Portal Application on Flutter

Firebase was used as the backend of the software. The application was published on the Google Play Store & Apple App Store.

Online Courses & Certifications

- Ethereum & Solidity (Jul. 2021) - [Udemy \(UC-50eb9407-2e7c-4f8d-885e-76542a9e100b\)](#)
- Raspberry Pi Full Stack (Jul. 2021) - [Udemy \(UC-d73ecf4a-c8e5-4b88-878d-1a807c5bfaf0\)](#)
- Blockchain Specialization (Jul. 2021) - [Coursera, University at Buffalo \(XVS95ES49WJJ\)](#)
- KiCad Developer (Apr. 2019) - [Udemy \(UC-TRGOH7JJ\)](#)
- Basic electronics for Arduino Makers (Nov. 2018) - [Udemy \(UC-47FU85S3\)](#)
- Arduino Step by Step: Getting Started (Nov. 2018) - [Udemy \(UC-GZ6HNB9I\)](#)
- Arduino Step by Step: Getting Serious (Feb. 2019) - [Udemy \(UC-SSUZWC9D\)](#)
- Flutter & Dart: Complete App Development Course (May. 2018) - [Udemy \(UC-TKC2KR19\)](#)

- Certified Ethical Hacker (Jan. 2017) - [Innobuzz Knowledge Solutions \(30933\)](#)
- Certified HTML5 Developer (Nov. 2016) - [Vskills \(5694\)](#)
- HTML Developer (Nov. 2016) - [Sololearn \(CT-XI7JNF8S\)](#)
- CSS Developer (Nov. 2016) - [Sololearn \(CT-LFBOFHZW\)](#)

Skills

- **IoT Development:** IoT Product Development, LoRaWAN, WiFi, BLE
- **Web Development:** Web Development, Bootstrap, ReactJS, NextJS
- **Mobile App Development:** Flutter, Firebase, GetX, Cloud Functions
- **Hardware Development:** PCB / Circuit Design, Arduino, Raspberry Pi

Languages

- **Hindi** [Native]
- **English** [Fluent]
- **Punjabi** [Basic]

Professional Memberships

- | | |
|---|-------------------|
| IEEE Member (95667127) | 09/2019 - present |
| Indian Society of Remote Sensing (ISRS) Lifetime Member (L-6315) | 05/2024 - present |
| International Society for Photogrammetry and Remote Sensing (ISPRS) Member (2024) | 05/2024 - present |
| Geoscience and Remote Sensing Society (GRSS) Member (2024) | 05/2024 - present |