YOGI N. PATEL

21bce328@nirmauni.ac.in +91-7041799000 Surat, Gujarat, India - 394130 Portfolio Site

Profile

Undergraduate student at Nirma University with a fervent interest in machine learning and artificial intelligence. Dedicated to exploring new frontiers in these fields and leveraging theoretical knowledge to solve complex problems. Proficient in foundational concepts of AI and eager to contribute to advancements in the industry.

Education

•INSTITUTE OF TECHNOLOGY, NIRMA UNIVERSITY *2021-2025*
B.Tech. Computer Science & Engineering SPI: 7.93/10.0

•ATMIYA VIDYA MANDIR *2019-2021*
Higher Secondary School HSC: 95.4%

Experience

•BACKEND DEVELOPER AND DATA ANALYST *Jan 2025 - Present*
D360 Business Assist

- Developed and integrated backend functionalities for the company's website, enhancing operational efficiency.
- Utilized Google Cloud Functions to automate backend processes and streamline data workflows.
- Designed and implemented an AI-based recommendation system to assist diamond companies in making optimal business deals.

•FRONTEND DEVELOPER INTERN *May 2024 - July 2024*
Maa Umiya Enterprise

- Utilized React.js and Tailwind CSS for a responsive, modern UI, and implemented Firebase for real-time database management.
- Enhanced user engagement and transaction flow, positioning Maa Umiya Enterprise as a tech-driven leader in its domain.

•RESEARCH STUDENT *Mar 2023 - Present*
Sudeep Tanwar's Research Group

- Conducted research in AI-driven network security and healthcare applications, contributing to 20+ research projects.
- Currently developing a machine learning-based fault detection system for optical fibers in software-defined networks.
- Exploring how vehicular communication can be enhanced using AI and how it can be secured using Blockchain.
- Recently got paper accepted in prestigious IEEE ICC Symposium 2025 on **'AI-driven Secure UAV Communication Framework for Document Delivery in Sensitive Areas with 5G'**.

Research Publications

•Blockchain-Based Network Security Analysis Framework for Telesurgery Systems in Healthcare. **[Link]**
Security and Privacy 2025

•Faster R-CNN based Framework For Bone Fracture Detection in Telesurgery Systems in Healthcare 4.0. **[Link]**
IEEE GCAT 2024

•SDN-care: Deep Learning-assisted Software Defined Networking Framework for IoT-Healthcare. **[Link]**
IEEE Globecom 2024

•Blockchain and DL-based brain tumor prediction scheme for telesurgery systems in healthcare 4.0. **[Link]**
IEEE IWCMC 2024

•Transfer learning-based breast cancer detection for telemedicine systems in healthcare environment. **[Link]**
IEEE SCIoT 2024

•Blockchain-Based Decentralized Application for Telesurgery in Metaverse Environment. **[Link]**
IEEE Confluence 2024

•Blockchain and ML-Based Framework for Diabetes Assessment of Patients in Telesurgery System. **[Link]**
IEEE SmartGenCon 2023

•Blockchain and AI-based engine fault detection scheme for autonomous vehicles. **[Link]**
IEEE CCCI 2023

Technical Skills and Interests

Programming Languages : C, C++, Python, Java, HTML, CSS, Javascript, LaTeX
Technical Skills : Machine Learning, Deep Learning, Object-Oriented Programming, Data Structures and Algorithms, Database Management System, Operating Systems, Data Mining, Information Retrieval System, Compiler Construction, Data Visualization
Soft Skills: Communication, Problem-Solving, Emotional Intelligence, Teamwork, Open-mindedness, Networking, Resilience