Manush Prajwal

Bangalore | manushprajwal1@gmail.com | 9844775528 | Portfolio | LinkedIn | GitHub

Professional Summary

Computer Science undergraduate with 2+ years of experience in full-stack development and applied research. Delivered 10+ real-world projects and authored 5+ research papers, including a pressure-sensing system for diabetes detection using ESP32 and machine learning. Skilled in React, Next.js, Firebase, and Python, with a focus on rapid prototyping, technical innovation, and cross-functional collaboration in fast-paced environments.

Education

BE **Computer Science and Engineering, The Oxford College of Engineering** Sept 2023 – Present

PUC **Alvas PU College, Moodubidri** 2020 – 2022

Experience

Freelance, Full Stack Developer May 2023 – Present

Live

- **The Hawk Fit Hub** (Next.Js)
  Developed a visually engaging and mobile-friendly gym website with real-time class booking. Increased traffic 3x and membership signups by 45%.

Publications

Diabetes Mellitus Diagnosis using Optical Ring Resonators Jan 2024

IEEE Xplore

- IEEE INDIACom 2024 – Developed a 90%-accurate, non-invasive detection model reducing diagnosis time by 50%.

Projects

Dynamic AI-Driven Load Balancing for Efficient Web Server Resource Allocation github.com/repo

- Designed a hybrid Q-Learning + Random Forest-based system to dynamically distribute cloud server loads.
- Problem Solved: Improved resource allocation accuracy to 91.7%, optimizing cloud performance during high traffic spikes.

A Neural Network-Based Framework for Diabetes Prediction from Foot Pressure github.com/repo

- Built a CNN-MLP model to predict diabetes from foot pressure data and Pressure sensor embedded insoles.
- Problem Solved: Enabled non-invasive screening by achieving 89% prediction accuracy in identifying abnormal foot pressure distributions linked to diabetic risk.

Student Hub – Unified Platform for Academic Engagement StudentHub.com

- Developed a centralized web platform for Students for Jobs, Issue reporting, announcements, and resource access.
- Problem Solved: Streamlined communication across departments, serving 1300+ students Daily and reducing resource discovery time by over 85%.

Advanced Intrusion Detection System Using Deep Learning github.com/repo

- Implemented a deep learning-based IDS combining signature-based and anomaly detection techniques.
- Problem Solved: Predicted 89% of Man in the Middle Attacks with <0.5% false positives in network simulations..

Skills

Languages: Python, C, C++, JavaScript, SQL, TypeScript.

Frameworks: React.Js, Next.Js, Node.Js, Express.Js, Nest.Js, Docker, Git