

PRITHVIRAJ VERMA

+91 9926719150 | prithraj120@gmail.com | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

EDUCATION

Institute of Infrastructure Technology Research and Management (IITRAM)

Ahmedabad, Gujarat, India

July 2023 – August 2027 (Expected)

Bachelor of Technology – Computer Engineering – CPI: 7.9/10

EXPERIENCE

Full-Stack ML Engineer

Garnet AI, Dublin, Ireland – Remote

May 2025 – Present

React, Node.js, PostgreSQL, AWS, AIML

- Spearheaded the development of a full-stack SaaS Vendor Onboarding platform, reducing onboarding time by 40% and improving sales efficiency across B2B operations.
- Integrated GPT-4 powered automation modules for compliance documentation and vendor verification, cutting manual workload by 60%.
- Built CI/CD pipelines on AWS with Docker and GitHub Actions, achieving zero-downtime deployments and accelerating feature delivery cycles by 30%.

Machine Learning Engineer Intern

Insolare Pvt. Ltd., Ahmedabad, India – Remote (Part-time)

Apr 2025 – Dec 2025

Python, Deep Learning, Computer Vision, GIS

- Developed a real-time facial recognition attendance system with >98% verification accuracy, eliminating proxy check-ins across 3 sites.
- Automated drone-based solar panel defect detection using CV models, increasing inspection efficiency by 75%.
- Designed a geospatial dashboard integrating live GPS data, enabling engineers to plan solar maintenance 30% faster.

Research Intern

IIT Delhi, New Delhi, India

Jan 2025 – Jun 2025

Deep Learning, EEG, Explainable AI, Python

- Built high-accuracy deep learning models for EEG signal classification: 99.58% for K-complex and 98.08% for spindle detection on sleep datasets.
- Incorporated Explainable AI methods (e.g., Grad-CAM, SHAP) to increase model transparency for clinical neurologists.
- Developed a real-time EEG analysis pipeline, reducing manual scoring time by over 50% in trial deployments.

PUBLICATIONS

- **Automated Identification of Cyclic Alternating Patterns of Sleep Using Fusion of VGG16 and Vision Transformer**, *IEEE Access*, 2025. DOI:10.1109/ACCESS.2025.3571145
- **PPG-Based Accurate Insomnia Detection System Using Convolutional Neural Networks With Self-Attention Mechanism and Gated Recurrent Units**, *IEEE Access*, 2025. DOI:10.1109/ACCESS.2025.3598863

PROJECTS

RentHive

GitHub

Node.js, Express, MongoDB, React, JWT

- Developed a full-stack rental management platform with role-based authentication, product/inventory management, quote and order workflows, and mock payment processing.
- Implemented automated notifications, PDF invoice generation, and analytics dashboards for revenue, customer trends, and inventory utilization.

Autonomous Startup Validator

GitHub

LangChain, Node.js, React, Supabase

- Developed a multi-agent AI platform that autonomously validates startup ideas by generating market research, MVP roadmaps, SWOT analyses, and pitch decks using LangChain agents.
- Integrated Google Search and Notion APIs for live data extraction; implemented freemium access with PDF export and scoring metrics for monetization.

TECHNICAL SKILLS

Languages: Python, C++, JavaScript, SQL (PostgreSQL), HTML/CSS

Frameworks: React, Node.js, Flask, LangChain, FastAPI

Libraries: PyTorch, TensorFlow, HuggingFace Transformers, scikit-learn, pandas, NumPy, Matplotlib, Seaborn

Tools/Cloud: Git, Docker, CI/CD, Netlify, Vercel, AWS, Supabase