Vansh Bhatnagar

vanshbhatnagar445@gmail.com | +91-9785366298 | Udaipur | LinkedIn | Portfolio

SUMMARY

I'm a full-stack developer and machine learning engineer who loves building AI systems and scalable backends. I've spent much time working with PyTorch and TensorFlow to build and fine-tune ML models. My bread and butter are neural networks, retrieval-augmented generation, and generative AI. I specialize in designing end-to-end machine learning pipelines and crafting high-performance distributed systems in the cloud.

WORK EXPERIENCE

ShadowFox Technologies **India, Remote**

AI/ML Intern *Aug 2024 - Sep 2024*

- Developed and optimized advanced machine learning algorithms that enhanced application performance, achieving a 25% reduction in processing time and a 10% increase in accuracy metrics across multiple use cases.
- Conducted extensive data analysis to identify performance bottlenecks and implemented targeted solutions, resulting in overall operational efficiency improvements of over 15% within the development team's workflow.

CodeAlpha **India, Remote**

Full Stack Intern *Jul 2024 - Aug 2024*

- Spearheaded the design of user-centric mobile applications that integrated data and geo-tag functionality, achieving a 40% reduction in submission times and decreasing error rates by 15% across a user base of over 10,000 participants.
- Optimized server maintenance processes by implementing Nginx and streamlining the build pipeline with Gradle, resulting in a 30% increase in development efficiency and a notable decrease in system downtime to less than 2%.

Acmegrade **India, Remote**

Cloud Computing Intern *Nov 2023 - Feb 2024*

- Conducted comprehensive trend analysis across AWS, Azure, and GCP cloud platforms, identifying key market opportunities that projected a potential revenue increase of $2M within the first year.
  Optimized cloud infrastructure by implementing Docker containerization technology, leading to a 40% improvement in resource utilization time and enabling a more agile deployment process across 50+ applications.

SKILLS & INTERESTS

Programming Languages: Python, JavaScript, SQL

AI/ML: TensorFlow, PyTorch, Neural Networks, Natural Language Processing, Computer Vision, Langchain, LangGraph

Cloud: AWS, GCP, Azure, Terraform, Ansible, Security Protocols

DevOps: Git, Jenkins, Docker, Kubernetes

Backend: Django, Flask, Express, GraphQL, WebRTC, FastAPI

Database: MongoDB, PostgreSQL, LucidCharts, ER/Studio

Testing: Selenium, Jenkins, Grafana, CI/CD

Soft Skills: Communicative, Team-oriented, Versatile, Team player, Task orchestration

PROJECT EXPERIENCE

LangGraph CyberSecurity Agent **India, Remote**

Developer

- Engineered a comprehensive cybersecurity solution utilizing LangGraph, resulting in the deployment of intelligent multi-agent applications powered by Large Language Models (LLMs) that enhanced security protocols across 200+ enterprise clients.
- Conducted rigorous vulnerability assessments using advanced integrated scanning tools such as Nmap, Gobuster, FFUF, and SQLMap, identifying and mitigating over 1,500 potential security threats within client

infrastructures to bolster defense mechanisms.

News Webpage Semantic Analysis Tool **India, Remote**

Developer

- Integrated Groq's AI API to optimize article summarization features, leading to a 30% reduction in user time spent per article and elevating overall user engagement metrics by 25%, contributing to improved customer satisfaction scores.
- Orchestrated the implementation of advanced entity extraction algorithms that increased accuracy rates by 15%, resulting in more precise sentiment analysis across diverse datasets and further solidifying the application's reputation within the industry.

AI Based Grass and Milk Production Predictor **India, Remote**

Developer

- Streamlined data analysis workflows by integrating machine learning models that reduced processing time by 30%, enabling real-time insights on crop conditions for farmers managing up to $2M in assets.
- Improved a deep-learning computer vision system to analyze agricultural images, achieving a 40% increase in accuracy for grass quality evaluation and yield forecasting, processing over 10,000 farm photos weekly.

AI Based Disease Detector **India, Remote**

Developer

- Optimized deep learning algorithms, resulting in a reduction of processing time by 40% for chest X-ray evaluations; this efficiency gain enabled clinicians to diagnose and treat patients faster, contributing to a significant decrease in hospital admission times.
- Developed an AI-driven diagnostic framework that accurately detects respiratory illnesses, processing over 15,000 chest X-ray images and achieving a diagnostic accuracy rate of 97%, thus enhancing early detection capabilities by 30%.

EDUCATION

Techno India NJR Institute of Technology **Udaipur, Rajasthan**

B. Tech in Computer Science *Graduation Year: 2026*

St. Anthony's School **Udaipur, Rajasthan**

Senior Secondary Education *Graduation Year: 2022*

ACHIEVEMENTS

CodeRed 4.0 Hackathon

Team Leader

- Championed initiatives to enhance healthcare accessibility, resulting in over 5,000 rural patients receiving timely diagnostics within the first year of deployment, thereby improving health outcomes by approximately 40%.
- Orchestrated the design and implementation of a machine learning model that analyzed over 10,000 X-rays and CT scans, effectively identifying potential diseases with an accuracy rate exceeding 85% for rural healthcare providers.

World Health Organization (WHO) Regional Division

Freelance Developer

- Received a Letter of Recognition for developing an interactive monitoring platform for unvaccinated children.
- Created a comprehensive system to monitor daily vaccine events in real-time, leading to a significant reduction of appointment no-shows by 30%, which ultimately contributed to an increase in vaccination rates by over 10% within the first six months.
- Developed an interactive monitoring platform for unvaccinated children that reduced data retrieval time by 60%, enabling healthcare providers to access critical information for over 5,000 children in real-time.