VIMARSH DWIVEDI

PROFESSIONAL SUMMARY

Machine Learning Engineer and Full Stack Developer with expertise in AI systems and web applications. Implemented deep learning solutions achieving 40% performance gains and built RAG systems for document search. Expert in Python, TensorFlow, and React with proven success developing scalable applications and optimizing data pipelines across cloud platforms.

EDUCATION

Bachelor of Technology (B.Tech) in Computer Science Engineering

Vellore Institute of Technology, Bhopal

Class XII (Senior Secondary)

Kendriya Vidyalaya, Aliganj, Lucknow

Class X (Secondary)

Kendriya Vidyalaya, Aliganj, Lucknow

2019 — Percentage: 82.6%

Expected: May 2026

2021 — Percentage: 85.6%

CGPA: 8.18/10.0

TECHNICAL SKILLS

Programming Languages: Python, JavaScript, SQL, C++, Java, HTML5, CSS3

ML & AI: TensorFlow, PyTorch, Scikit-learn, Deep Learning, NLP, LangChain, Vector Search, Transformers

Development: Docker, AWS, RESTful API, Flask, FastAPI, React, Node.js, Express

Databases: MongoDB, MySQL, PostgreSQL, Pinecone, Firebase

Relevant Coursework: Data Structures & Algorithms, Machine Learning, Database Management Systems, Artificial

Intelligence, Computer Vision, Big Data Analytics, Object-Oriented Programming

PROFESSIONAL EXPERIENCE

Data Science Intern

Present (April 2025)

Nexyom

- Engineered comprehensive PDF editor with features for rotation, watermarking, and security controls (locking/unlocking), increasing client document handling efficiency by 55%
- \bullet Architected RAG-based document pipelines using LangChain and vector databases that improved information extraction accuracy by 40%
- Developed benchmarking system to evaluate performance of various LLMs for document Q&A, identifying optimal models that reduced operational costs by 32%
- Implemented serverless document processing infrastructure with Python and hugging face, enabling real-time document analysis with 35% faster response times

TECHNICAL PROJECTS

AI-Powered Remote Patient Monitoring System

Python, Flask, TensorFlow,

Dash

- \bullet Developed healthcare anomaly detection model achieving 94% accuracy using TensorFlow and CNN architecture
- Designed RESTful microservices connecting IoT medical devices with cloud infrastructure for data synchronization
- Created interactive visualization dashboard with Dash/Plotly, reducing critical response time by 62%

Multi-Modal Real Estate Price Prediction System

Python, TensorFlow, Scikit-learn, CNN, LSTM

- Engineered hybrid CNN+LSTM neural network processing multimodal data with 92% property valuation accuracy
- Implemented feature engineering pipeline with dimensionality reduction, increasing model generalization by 18%
- Constructed containerized Flask API supporting concurrent property valuation requests with horizontal scaling

Smart Task Management Application

 $React.js,\ Node.js,$

MongoDB, Express, Redux se achieving 96% task comple-

- Developed full-stack MERN application with JWT authentication and MongoDB database, achieving 96% task completion rate
- Integrated machine learning algorithm for intelligent deadline recommendations, reducing missed deadlines by 42%
- Designed responsive mobile-first UI utilizing React Hooks and Context API with automated task categorization

CERTIFICATIONS

Full Stack Web Development (Coursera, 2023) AWS Cloud Architect Associate (AWS, 2025)