Vaibhav Jain

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github.com/vaibhav-INDIE | LinkedIn

Education

KIIT, Bhubaneswar 2022 – Present
B.Tech, CSSE, 7th Semester — CGPA: 8.61

Jaypee Public School 2020 – 2022
- Class XII (CBSE), 2022 — 87.8%
- Class X (CBSE), 2020 — 79%

Technical Skills

- **Languages:** Python, SQL, JavaScript, Java
- **Frontend/Backend:** React, REST APIs, Flutter, Dart
- **AI/ML Libraries:** TensorFlow, PyTorch, Scikit-learn, Transformers, Pandas, NumPy, Matplotlib, Seaborn
- **Dev Tools:** Git, Docker, VS Code, Jupyter, Postman
- **Deployment/Cloud:** Firebase, MySQL, Streamlit

Research Experience

Mathematical Problem Solving using LLM Reasoning and Genetic Algorithm (Results)

- Enhanced LLMs with Genetic Algorithms on MATH-500 dataset for problem solving.
- Engineered a hybrid Genetic Algorithm-LLM framework that significantly boosted mathematical reasoning, achieving **80.6% accuracy** with a Qwen2.5-14B model.
- Outperformed the baseline Qwen2.5-72B parameter model, proving the efficiency and power of the novel approach.
- Excelled at solving elite-level problems, reaching **62% accuracy** on the challenging Level 5 math problems.

Projects

AI.Rassoi (App link) (Website link) *2023 – Present*

- Designed and developed an AI-powered nutrition assistant that generates personalized daily diet plans using the Gemini API.
- Integrated features like a calorie tracker, AI-based recipe recommendations, and performance analytics.
- Built using Flutter (front-end) and SQL (back-end), ensuring a seamless user experience.

Hate Speech Recognition using ANN (GitHub Repository Link)

- Built a deep learning-based hate speech detection model using an Artificial Neural Network (ANN).
- Implemented data preprocessing techniques such as tokenization, stemming, and word embeddings to improve accuracy.
- Achieved 94% accuracy by incorporating early stopping mechanisms and tuning hyperparameters for efficiency.

Diabetes Prediction Model (GitHub Repository Link) *2024*

- Using Advanced exploratory data analysis and K-Means cleaned 24 invalid records (Insulin=0, Glucose<80) and transformed continuous features into categorical bins.
- Applied StandardScaler, Elbow-Method and trained a Logistic Regression model.
- Achieved 81.88% accuracy after GridSearchCV tuning (C=0.1, penalty='l1').

Professional Experience

AI Intern – FinvestFx (May 2025 – July 2025) (Internship Link)

- Built a Retrieval-Augmented Generation (RAG) system to analyze Excel-based business receipts and payments.
- Developed a pipeline using FAISS for semantic similarity and Gemini for contextual summarization.
- Reduced manual processing by 60% and enhanced financial reporting efficiency.

Certifications

Programming
- SQL Advanced — HackerRank (2025)
- Python Essentials 1 — Cisco (2025)
- Python Essentials 2 — Cisco (2025)

AI / Machine Learning
- IBM Machine Learning Professional Certificate
  Covered data preprocessing, regression, classification, deep learning, and hands-on capstone projects.