K VIJAY KUMAR SWAMY

+917483814456 | kvijaykumar9743@gmail.com | linkedin | Github | kvijaykumar.vercel.app

Objective

I am a Data Science undergraduate and Software Developer, passionate about Machine Learning and AI. I actively contribute to open-source projects, communicate ideas clearly and enjoy leading teams. I love building software that solves real-world problems.
I am always eager to learn new technologies and grow with a collaborative, innovative team.

Education

Visvesvaraya Technological University. — Bengaluru, October 2024 – 2028.

- B. Tech in Data Science.
- Minor degree in Economics and Finance.
- with CGPA of 8.1.

Smt. Y.J.R. Pre-University College. — Gangavathi, April 2022 – 2024.

- specialization in Computer science.
- with percentage of 81.4.

Technical Skills

Languages : C++, Python and Java.
Frontend : HTML, Tailwind CSS, Javascript, TypeScript, React and Next.js.
Backend : FastAPI, Node.js, Express.js, MySql, Sqlite, mongoDB and PostgreSQL.
Familiar : Git / Git-hub, Machine learning, AI agents, Postman and Figma.
DevOps : Docker, Kubernetes and Redis.
Coursework : Object Oriented Programming, Database Management System, Computer Networks, Data Structures and Algorithms, Deep Learning and Cyber Security.

Projects

Blu Visual Teacher - Offline Video Generation | GitHub — Python, FastAPI, React, Ollama

- Built an app that turns a topic or PDF into a narrated, animated video lesson, fully offline on a CPU.
- Used a local LLM (Qwen2.5 via Ollama) to plan scenes, with AI voice-over and word-by-word captions.
- Supports 7 languages (English, Hindi, Kannada, Tamil, Telugu, etc.) with MP4 and .srt export.
- Added PDF study packs: audiobook, video lessons and exam mode with flashcards and practice questions.

Campus Saathi - Campus Assistant | GitHub — Python, FastAPI, Gemma, RAG, ESP32

- Built a voice-based campus kiosk on ESP32 that answers visitor questions about the college.
- Implemented speech-to-text (faster-whisper) and RAG retrieval over a college knowledge base.
- Gemma generates short answers grounded only in retrieved pages; unrelated questions get a polite refusal.
- Answers are shown on a TFT display and spoken via edge-tts; also built a web kiosk version.

GrowthLens - Stock Insight & Prediction | GitHub — Python, Streamlit, LightGBM, FinBERT

- Building a platform that turns NSE and BSE market data and news into clear, explainable stock insights.
- Predicts 5-day price direction with LightGBM, LSTM and Prophet, explained using SHAP values.
- Scores news sentiment with FinBERT and combines nine checks into a Stock Health Score out of 100.
- Flags pump-and-dump patterns and saves every prediction to grade its accuracy automatically.

Achievement

- Multiple hackathon winner.
- Participated in 8 hackathons.
- Active open-source contributor.

Hobbies

- Music (playing guitar and flute), skateboarding and reading books.