SHAKTHI JASHWANTH CH

Bengaluru, Karnataka – 560061 · +91 7483692066

shakthi.jashwanth@gmail.com · 🔗 Shakthi Jashwanth · 🔗 Shakthi Jashwanth

Education

B.M.S College of Engineering, Bengaluru   **Oct 2023 – Present**
Bachelor of Engineering in Computer Science (Data Science)   *CGPA: 9.08*

Experience

Machine Learning Project Intern   **Apr 2025 – Sept 2025**
IEEE Computer Society Bangalore Chapter   *Guide: Dr. Pavan Kumar C, IIIT Dharwad*

- Built a multilingual cyberbullying detection and intervention system to flag unsafe content and suggest safer rewrites.
- Trained mBERT/RoBERTa for detection, achieving 87.3% F1 on Dravidian and 84% F1 on English.
- Implemented hate-type classification (Religion, Age, Gender, Ethnicity, Other) with >90% precision/recall.
- Fine-tuned T5-base for toxicity reranking (ROUGH-L 0.89, BLEU 0.82).

Projects

- **Aadhaar N.E.X.U.S – National Equity & eXclusion Unified System**   🔗 GitHub   🔗 Live Demo
  Developed an interactive analytics platform transforming Aadhaar operational data into actionable insights on digital service equity across 700+ Indian districts. Engineered multi-dimensional risk assessment framework evaluating enrollment access, update load capacity, and service stability using geospatial analysis. Built real-time monitoring dashboards with **Streamlit** and **Plotly** to visualize infrastructure gaps and demographic disparities.

- **Personal Knowledge Management System**   🔗 GitHub
  Designed an intelligent information retrieval system leveraging **Retrieval-Augmented Generation (RAG)** for semantic search and contextual responses. Architected AI workflow using **Langflow** for prompt orchestration and document retrieval pipelines. Developed cross-platform interfaces including web UI and **Kotlin Android application** for mobile integration.

- **Real-Time Multilingual Query Handler**   🔗 GitHub   🔗 Live Demo
  Engineered a production-ready RAG system supporting 15+ languages with automatic language detection and translation capabilities. Implemented semantic document retrieval using **sentence-transformers** with **ChromaDB** vector database for efficient similarity search. Integrated **Groq API** for low-latency LLM inference and deployed scalable web interface using **Streamlit**.

Technical Skills

Programming Languages: C, Python, Java, SQL, JavaScript, HTML, CSS
Software Tools: Visual Studio Code, Postman, MySQL Workbench, Apache NetBeans, Jupyter Notebook
Collaboration and Design Tools: Git, GitHub, Figma

Leadership and Extracurricular

- **Joint-Secretary - D-Sync:** Data Science Club, BMSCE. Actively volunteered and campaigned for BMSCE's technical fest, **PHASESHIFT**, and cultural fest, **UTSAV**, contributing to event promotion and organization.
- **Coordinator and Volunteer:** Coordinated and volunteered in various events hosted by **D-Sync**, ensuring smooth execution and participant engagement.
- **Active IEEE Student Member:** Participating in workshops, sessions, and collaborations.