Balaga Bala Krishna

Telangana, India |+91 9010108221 |balagabalakrishna0001@gmail.com| Github

EDUCATION

VIT BHOPAL UNIVERSITY — Bhopal, IND
Bachelor of Engineering - Computer Science and Engineering(Cloud Computing & Automation) — Expected May 2026
Cumulative GPA: 8.57/10

Sri Chaitanya Junior College (Class 12) — Telangana, IND
Math, Physics, Chemistry | **Percentage: 90.6%** — Jul, 2020 – Mar, 2022

Sri Chaitanya High School (Class 10) — Telangana, IND
Secondary School | **10.0 CGPA** — Jun, 2019 – Mar, 2020

UNIVERSITY PROJECTS

RankAI – Multi-LLM Response Comparison Tool — Aug, 2025- present
Team Project | Role: Team Lead, Backend Developer (Flask), API Integration & Prompt Engineer | Tech Stack: Flask, React, API's , SQL Lite , JavaScript, CSS

- **Designed and developed a Flask-based REST API backend** to **orchestrate parallel requests across multiple LLMs** (GPT-4, Gemini, Cohere, DeepSeek), enabling **real-time side-by-side comparison** of model responses.
- **Implemented concurrent execution and fault-tolerant API handling** using **threading, timeouts, and fallback logic**, ensuring **high availability and reliable response delivery** despite third-party API latency or failures.
- **Built a weighted scoring and ranking engine** to evaluate model outputs based on **accuracy, relevance, and coherence**, and **persisted performance metrics using SQLite and SQL queries**, enabling **historical analysis and data-driven model selection**.

Intelligent Code Snippet Search with Gemini AI Integration — Jan, 2025–Mar 2025
Personal Project | Tech Stack: Python, FAISS- NLP, Google Gemini AI API, Streamlit , HTML ,CSS

- **Designed and implemented a scalable semantic code search system** using **Sentence Transformers** and **FAISS (IndexIVFFlat)**, enabling **meaning-based retrieval** of code snippets beyond keyword matching and significantly improving **search accuracy and retrieval performance**.
- **Architected a modular dual-pipeline system** separating **deterministic semantic retrieval** from **generative AI workflows**, ensuring **reliable search results** while enabling **AI-assisted code explanation, debugging, translation, and generation**.
- **Integrated Google Gemini API with custom prompt engineering** and delivered a **production-ready Streamlit application**, featuring **dynamic action selection, efficient backend orchestration, and structured JSON mappings** to provide a **seamless, end-to-end developer experience**.

Blinkit E-Commerce Performance Analysis & Optimization — Oct, 2024 - Dec 2024
Personal Project | Tech Stack: Excel, Python, Streamlit, Power BI

- **Led end-to-end data cleaning and transformation** of large-scale e-commerce datasets using **Python (Pandas)** and **Excel**, ensuring **data quality, consistency, and accuracy** to enable **reliable KPI reporting and business decision-making**.
- **Designed and deployed executive-level analytics dashboards** using **Streamlit** and **Power BI**, delivering **real-time insights** on **order volume, customer health, delivery performance, average ratings, and top-selling categories**, enhancing **stakeholder visibility and operational performance tracking**.
- **Developed a time-series sales forecasting model** using **Facebook Prophet**, forecasting demand for the next **8 months** with **~85% R^2 accuracy and 5.2% MAPE**, enabling **data-driven decisions** for **inventory planning, workforce optimization, and revenue forecasting**.

ACTIVITIES

CERTIFICATIONS
- AWS Solutions Architect (Ethnus) Certificate
- Project Management Skills For Leaders (Linkedin) Certificate
- System Administration By Microsoft And Linkedin (Linkedin) Certificate

EXTRACURRICULAR / Competitive Programming
- **Technical Blogger | Medium.com** – Wrote articles on AI, programming languages, and tech industry trends.
- **Event Management Team Member | VIT Bhopal AI Club**
- **Content Writer | VIT Bhopal Data Science Club**
- **TCS CodeVita Season XIII (Round 1) – Global Rank ~1051**

ADDITIONAL

Technical Skills
Programming & Query Languages: Python, SQL, HTML, CSS.
Frameworks & Libraries: Flask, Streamlit, Pandas, NumPy, Matplotlib, FAISS, Sentence Transformers.
Tools & Platforms: MS-EXCEL, Microsoft Office, Time Series Forecasting (Prophet), Power BI, Git, GitHub, AWS, GCP.
CS Fundamentals: Data Structures & Algorithms, Operating Systems, Computer Networks, DBMS, Software Development Life Cycle, Object-Oriented Programming, Cloud Computing ,Cloud Security.
Soft Skills: Communication, Team Collaboration, Time Management, Adaptability, Stakeholder Communication, Documentation .