PREETHAM V R

AI / ML ENGINEER • DATA ANALYTICS • PYTHON DEVELOPER

Davanagere, Karnataka, India | preetamvr962002@gmail.com

LinkedIn • GitHub • Portfolio

Summary

MCA (AI & Data Analytics) student at GM University (9.00 CGPA) with a mathematics and physics undergraduate background, building end-to-end machine-learning and AI-powered applications in Python and Java. Completed a six-month on-site internship at Prodhee Technologies and works in a three-person freelance team with about ten client projects delivered. Hands-on across the full ML cycle (EDA, tuning, explainability, API serving, CI, Docker). Independent researcher on lightweight LLMs in RAG. Seeking an AI / ML Engineer role.

EDUCATION

GM University, Davanagere, Karnataka — **2025-2027**
Master of Computer Applications (MCA) - AI & Data Analytics — **CGPA: 9.00 / 10**

TECHNICAL SKILLS

Languages	Python, Java, SQL, TypeScript, JavaScript
Frontend	React, Vite, HTML5, CSS3
Backend & APIs	FastAPI, Flask, REST APIs, Next.js, Spring Boot (basic), JWT authentication
Data & Analytics	NumPy, Pandas, Matplotlib, Seaborn, EDA, Statistics, Tableau, Power BI, Excel
AI / ML	Scikit-learn, LightGBM, XGBoost, PyTorch, SHAP, MLflow, NLP, RAG (ChromaDB), Hugging Face, LoRA / DPO fine-tuning
Databases	MySQL, PostgreSQL (Supabase), MongoDB / NoSQL, ChromaDB
Tools & DevOps	Git, GitHub, GitHub Actions (CI), Docker, AWS Lambda (configs), Jupyter, Kaggle

EXPERIENCE

Prodhee Technologies Pvt. Ltd. | Bengaluru, India
Offline (On-site) Intern | *6 months*

- Completed a six-month in-person internship at a software company building custom software, applied AI and cloud solutions.

SmartBridge (SmartInternz) | Virtual Internship
Google Cloud Generative AI Virtual Intern | *14 Jul 2025 - 1 Sep 2025*

- Completed the Google Cloud Generative AI internship, applying generative-AI concepts practically (Certificate ID: VIP-AI-2025-15106).

Forage Virtual Job Simulations | *Jun 2025*

- **Tata - Data Visualisation:** built data visualisations for a consulting business and prepared questions for a meeting with senior client leadership.
- **Deloitte Australia - Data Analytics:** forensic-technology data analysis, a Tableau dashboard and Excel-based business conclusions.

PROJECTS

Student Dropout Early-Warning System | *Python, LightGBM, XGBoost, MLflow, SHAP, FastAPI, Docker* | *Ongoing*

- Flags likely dropouts from first-semester data only (4,424 students, 35 features) using leakage-free features and cross-validated LightGBM / XGBoost; 0.91 ROC-AUC on a held-out test set, 90% of dropouts caught, threshold set by a cost-based F2 score.
- Tracked experiments with MLflow, explained predictions with SHAP, and served the model via FastAPI (single and batch prediction) with 7 automated tests, GitHub Actions CI and Docker / AWS Lambda configs.

IMDB Sentiment Analysis - 50,000 Reviews | *Python, scikit-learn, PyTorch, NLP* | *Ongoing*

- Full EDA plus 12 classical models and 3 PyTorch networks (embedding average, TextCNN, BiGRU). Best: TF-IDF word pairs with a linear SVM at 91.7% test accuracy, ahead of all neural networks (87.6-89.1%); stemming and stop-word removal slightly lowered accuracy.

Custom Code LLM - Sequential LoRA Fine-Tuning | *7B base model, LoRA, DPO, Kaggle* | *Ongoing*

- Fine-tuning a 7B base model through five sequential LoRA phases on 400K+ examples, with DPO on correct-vs-rejected code pairs, triple-gate quality filtering and sequence packing for 2x+ faster training.

InsightAI - Autonomous AI-Powered Data Analytics Dashboard | *TypeScript, AI* | *Completed*

- GM University Seed Money project: a dashboard that lets users explore datasets and get automated, AI-generated insights. Internal build, not publicly deployed.

Lead Management System - Microservices | *Java, Spring Boot, JWT, MySQL* | *Completed*

- Backend developer for GM University's lead platform: migrated a legacy PHP / MySQL system to Java Spring Boot microservices with JWT auth, role-based access, lead CRUD, CSV import / export, assignment with audit log and dashboard stats. Internal use, not publicly deployed.

HACKATHONS, RESEARCH & ACHIEVEMENTS

- **IGNITRON 2026:** Event Coordinator, GM University national level tech fest (3-5 Dec 2026).
- **InnovateX 4.0:** Hackathon participant, Presidency University; also took part in several other hackathons.
- **NOVA LABS Independent Research:** co-authored a paper on lightweight LLMs in RAG systems with Mr. Varun K S (GM University).
- **Academics:** Grade "O" (outstanding) in Introduction to Data Science and NoSQL Lab.