

Gabriel James

AI & Machine Learning Engineer | ML · Python · Cloud

✉ gabriel22dec@gmail.com

📞 +91 790 298 7125

LinkedIn gabrieljamesamara

Github gabsj

Website gabrieljames.me

PROFESSIONAL EXPERIENCE

AI Project Lead – Team Arete (Hackathon Research Team)

Government Engineering College Thrissur

04/2025 – Present

- Led a multidisciplinary team building **production-grade AI systems**, including a **real-time crowd risk detection platform** and a **legal document processing engine**.
- **Owned system design and ML direction**, unblocking implementation issues to deliver **end-to-end solutions**.
- Achieved **Top 6 at HackOdisha 5.0** and **Top 15 at HackHazards '25** (17,000+ teams).

AI & Machine Learning Engineer

Independent / Open Source

2024 – Present

- Built **end-to-end ML pipelines** across **NLP, computer vision, and time-series tasks**, from data ingestion to evaluation.
- Integrated **LLM APIs** into backend services with attention to **latency, prompt design, and failure handling**.
- Developed **reusable Python data-processing utilities** to standardize experimentation and speed up iteration.

Campus Ambassador

Namespace ☁

11/2025 – Present

- Represented a **global developer ecosystem platform** on campus, driving **student adoption and engagement**.
- Organized **demos, webinars, and outreach activities**, collaborating with student clubs and faculty to grow the **local developer community**.

Student Developer

IEEE Computer Society, GEC Thrissur

12/2024 – Present

- Conducted **hands-on workshops** on machine learning and **Git-based collaboration**.
- Mentored peers on **practical ML implementation, debugging, and project workflows**.

EDUCATION

Bachelor of Technology in Computer Science and Engineering

Government Engineering College, Thrissur

2024 – 2028

CGPA: 9.89/10

TECHNICAL SKILLS

Languages & Tools

Python, Java, C, TypeScript, SQL, Flask, React, Next.js, Git, Docker

AI/ML & Data Science

TensorFlow, PyTorch, NumPy, Pandas, scikit-learn, OpenCV, NLP, YOLOv8, PCA, Predictive Modeling

Databases & Cloud

PostgreSQL, SQLite, AWS, Supabase, CI/CD

PROJECTS

Market Volatility Spike Detector ☁

Statistical ML & Time Series | Python · NumPy · Pandas · SciPy · Flask

- Built a **multivariate anomaly detection system** using **Rolling Gaussian models** and **Mahalanobis distance** for market stress detection.
- Modeled joint behavior of **returns, volatility, volume, and |return|**, flagging the **top 0.5% extreme events** via percentile thresholds.
- **Validated detections against real-world market shocks (COVID crash, SVB collapse, major Fed actions)** using interactive visualizations.

XENIA – AI-Powered Study Suite ☁

Applied ML + LLM Systems | Gemini 2.5 Flash · Flask · Next.js · Python

- Designed an **AI pipeline for syllabus parsing, difficulty estimation, and adaptive plan generation**.
- Implemented **analytics-driven regeneration** using performance signals and weak-area detection.
- Achieved **<2s plan generation, 95% quiz relevance, and 87% 30-day retention**.

Stampede Predictor ☁

Computer Vision & Real-Time ML | YOLOv8 · OpenCV · Python

- Developed a **real-time crowd density and risk prediction system** using object detection and spatial grid analysis.
- Implemented **multi-tier risk classification** with spatio-temporal aggregation and live alerts.
- Achieved **~30 ms/frame inference** and **Top 15 / 17,000+ teams** at HackHazards '25.

ATHENIS – Legal Document Simplifier ☁

NLP & ML Systems | PyTorch · Transformers · Flask

- Built an **AI engine for clause-level legal simplification and risk classification** using transformer embeddings.
- Combined **rule-based heuristics + LLM inference** for higher precision.
- **Top 6 finalist** at HackOdisha 5.0 (500K+ participants).

Selected:

Smart Investment Advisor (Ensemble ML, HMM regime detection), Trading Strategy (PCA & backtesting)

CERTIFICATIONS

Machine Learning Specialization (Stanford & DeepLearning.AI) · Advanced Learning Algorithms (Stanford) · Generative AI Engineering & Fine-Tuning Transformers (IBM) · AWS Cloud Practitioner (AWS) · Financial Markets (Yale)

ACHIEVEMENTS & LEADERSHIP

Winner — Srishti 2025 (XENIA) · ₹10,000 cash prize