Priyansh Saxena

+91-7417513597 | priyena.career@gmail.com | linkedin.com/in/priyansh-saxena-ml-engineer | github.com/priyansh-saxena1 | priyanshsaxena.vercel.app

Experience

CNCF LFX Mentorship (KubeSlice) Sep. 2025 – Nov. 2025

Linux Foundation

- Engineered KubeSlice distributed topology engine, enabling flexible routing and slashing **VPN gateway** costs by 66%.
- Implemented **DFS** and bridge-finding algorithms to auto-heal network partitions and enforce security policies.
- Orchestrated cross-component CRD reconciliations and admission webhooks, enforcing guaranteed cluster state sync.
- Secured **100% test coverage** on topology logic, validating 950Mbps+ throughput via **E2E** iPerf tests.

Machine Learning Engineer May 2025 – Jun. 2025

Teeny Tech Trek

- Architected **GPT-4.1** & **FAISS** RAG system to analyze document context, serving **1K+** queries under **200ms**.
- Trained **GPT-4.1** question generator on domain data, realizing **¡300ms** latency with **85% BLEU** and **88% ROUGE**.

Open Source Contributions Mar. 2025 – Jun. 2025

gfpop, PeakSegOptimal, KCL, krkn-chaos

- Contributed **15+ PRs** to krkn-chaos and Meshery, integrating strict exclude_label and pod_selector validations.
- Resolved KCL core type coercions (#1946) and formulated **gfpop** time constraints, merging critical updates upstream.

Jaffa.ai – Software Engineer Intern Jul. 2024 – Feb. 2025

- Designed **Neo4j** & **LangChain** Graph RAG, applying community detection for multi-level document retrieval.
- Programmed **LangGraph** financial agent with DAG workflows and function calling, cutting analysis time by **75%**.
- Constructed automated BSE market pipeline via BeautifulSoup for dynamic entity extraction and sentiment analysis.

Projects

FinFedRAG | *TensorFlow Federated, FAISS, Docker* Nov. 2025 – Jan. 2026

- Built decentralized **Federated Learning** credit scorer with **differential privacy**, achieving an **85% F1-score**.
- Devised secure aggregation protocols for decentralized training, preventing raw data leakage at institutional scale.
- Synthesized **10K** financial records, deploying predictive AI model on Hugging Face with **¡100ms** inference latency.

LLM Integrated Excel Plotter App | *Qwen, BART, React, Docker* Aug. 2025 – Oct 2025

- Integrated local **Qwen** inference and **BART** fallback to translate natural language into **Plotly**, yielding **85%** accuracy.
- Developed Docker ML backend for **10MB+** dataloads, mitigating LLM hallucinations via heuristic fallback parsers.
- Shipped React UI on Vercel delivering streaming AI responses and **1.2s** chart renders, achieving **95%** coverage.

Leadership & Positions of Responsibility

Placement Representative Mar. 2025 – Present

ABV-IIITM Gwalior

- Directed campus placements and strategic corporate outreach, streamlining recruitment logistics for **500+** students.

Achievements

- **National Semi-Finalist** in Flipkart GRiD 7.0 (Top **0.1%** of 450k+ participants).
- Secured **Institute Rank 5** in ICPC 2024-25 (Highest in batch).
- Attained **5-Star** rating on CodeChef (Max: 2007), placing in top **1%** globally.
- Achieved **Specialist** rating on Codeforces (Max: 1518), solving **400+** competitive problems.
- Earned **Knight** badge on LeetCode, solving **600+** algorithmic problems.

Technical Skills

Programming & ML: Python, C++, Java, Go, Kotlin, SQL, TensorFlow, Keras, Scikit-Learn, OpenCV, LangChain, LangGraph
Backend & Data: Django, Flask, FastAPI, Docker, Streamlit, MLflow, Selenium, BeautifulSoup, Apache Spark
Databases & Cloud: MySQL, MongoDB, Neo4j, AWS(EC2, S3), Azure, MQTT, CI/CD (GitHub Actions), Kubernetes

Education

ABV - IIITM Gwalior Gwalior, India

Integrated B.Tech + M.Tech (Information Technology) *Expected 2027 | CGPA: 7.59*