# NIVETHA SATHIYAPAL – AI ENGINEER | DATA SCIENTIST

## Professional Summary

AI & Data Engineer with 6+ years of experience building Python-based, cloud-native, and AI-driven systems across healthcare, supply chain, and safety-critical environments. Skilled in rapid prototyping, edge-to-cloud deployment, and developing data-driven models used in real-world operational settings. Expert in FastAPI, PyTorch, NumPy, and scalable backend architectures. Strong collaborator with interdisciplinary teams and clients. Fluent in English.

## Work Experience

### Mu Sigma Inc., Bengaluru — Apprentice Leader (2022–2025)
- Built AI-powered safety and risk-assessment tools using Python, FastAPI, and Azure.
- Designed and deployed multi-agent GenAI systems using LangChain, LlamaIndex, AutoGen.
- Implemented data-driven models and security insights supporting sensitive operational workflows.
- Built PySpark + Databricks pipelines; delivered features rapidly using Git, GitHub, Jira, Confluence.
- Delivered production prototypes with strong ownership and user-centric design.

### Decision Scientist — Mu Sigma (2019–2022)
- Developed real-time disaster-response dashboards using geospatial & temporal data.
- Built FastAPI microservices optimized for low-latency safety insights.
- Designed forecasting models (ARIMA, LSTM) supporting public-service stakeholders.
- Built secure ETL pipelines (PySpark, SQL) for TB-scale datasets.

### Infosys Ltd., Chennai — Senior Systems Engineer (2015–2019)
- Developed secure Angular + Spring Boot platforms with optimized APIs.
- Automated workflows using Azure Logic Apps.
- Delivered UI/UX aligned with operator needs; used Git, Jira, Confluence daily.

## Technical Skills

Programming: Python (Advanced), NumPy, Pandas, FastAPI, Flask, SQL, R, PyTorch
AI/ML: RAG, Multi-Agent Systems, NLP, Embeddings, PyTorch DDP, Security Insights
Cloud: Azure, GCP, Docker, Kubernetes, GitHub Actions
Data Engineering: PySpark, ETL, Databricks, Prefect, Delta Lake
Auth & Infra: Keycloak, OAuth2, JWT
Tools: Git, GitHub, Jira, Confluence

## Education

B.Tech in Information Technology — St. Joseph Institute of Technology, Chennai (2015–2019)