Feras Mahmood

GenAI and ML Developer

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TECHNICAL SKILLS

Languages: Python, C++ (CUDA), JavaScript, TypeScript, Scala, SQL, Full-Stack Development
AI/ML & GenAI: PyTorch, Distributed Training (FSDP), YOLOv8, Transformers, GenAI Architecture
Cloud & DevOps: Azure (AKS, DevOps), GCP (GKE, Cloud Run), AWS (Glue, CloudFormation), Terraform
Data & Observability: Scalable ETL/ELT, ML Data Streaming, Datadog, Grafana, Prometheus, Tempo

EXPERIENCE

Sheridan College   Oct 2025 – PRESENT
ML Developer/Research Assistant   *Oakville, Ontario*

- **Platform & Data Governance:** Architected and governed highly scalable data schemas, ingestion pipelines, and automated validation workflows, specifically supporting productionized RAG Agents and sophisticated NLP systems.
- **CI/CD & Reproducibility (Model Lifecycle):** Operationalized the end-to-end MLOps lifecycle by architecting Databricks workflows and MLflow pipelines that automate feature engineering, model registration, and continuous evaluation for high reproducibility.
- **High-Volume Production Operations:** Managed the deployment and scaling of high-impact ML services using Scala and Spark for real-time data streaming and distributed processing, supporting 20,000+ active users with 99.9% uptime and governed model serving.
- **Cross-Functional Project Lead:** Collaborated with designers and developers, defining operational requirements and implementing best practices to ensure models, vector stores, and data flows were inherently scalable, maintainable, and cost-efficient in production environments.

Paradigm Electronics Inc.   May 2024 – Aug 2025
Data Analyst   *Mississauga, ON*

- **Data Pipeline Optimization & Automation:** Engineered and scaled robust ETL pipelines and complex SQL transformations using Apache Airflow, resulting in the automated daily, Month-to-Date (MTD), and Year-to-Date (YTD) reporting for Global sales operations.
- **Business Intelligence & Financial Impact:** Developed and deployed key performance indicator (KPI) dashboards for Finance and Sales teams, incorporating automated anomaly detection that directly led to the recovery of $15,000 CAD in misplaced costs.
- **Strategic Data Analysis & Revenue Growth:** Conducted deep-dive data analysis on product quality metrics and sales performance indicators, providing actionable insights that fueled a documented 20% revenue growth for the organization in Q2, 2024.

PROJECTS

HR GenAI Application | Next.js, React, TypeScript, LangChain Ecosystem, Azure

- Built an AI-powered ATS to automate resume parsing, candidate scoring, and RAG-based evaluation.
- Implemented autonomous research agents with Puppeteer to verify candidate claims via GitHub and portfolio analysis.

- Deployed event-driven infrastructure using Terraform on Azure using MongoDB change streams and GitHub Actions, and monitored microservices and model performance using Tempo, Prometheus and Grafana.

Sports Analytics App | Flutter, Python, YOLOv8, Cloud Run, Pub/Sub, RandomForest

- Developed a production-grade CV application analyzing cricket shot mechanics in real-time using YOLOv8 for high-speed ball tracking and RandomForest classifiers to provide instant coaching feedback.
- Built a cross-platform mobile app (Flutter) with decoupled serverless inference on Google Cloud Run and asynchronous messaging via Pub/Sub, ensuring cost-effective scaling to zero.
- Achieved First Place in Capstone showcase; deployed to production with active users and cost-optimized ML inference.

EDUCATION

Sheridan College   Sep 2021 – Apr 2026
Bachelor's Degree in CS (Data Analytics)   *Oakville, ON*

- GPA: 3.1
- Achievements: Secured First Place in Capstone Showcase, recognized for innovation, technical excellence, and real-world impact in AI-powered sports analytics