

TALEEF TAMSAL

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SUMMARY

Software engineer who ships production systems and measures whether they work. Rebuilt a healthcare compliance platform as sole developer, published three first-author papers on model evaluation, and ran product operations at a startup.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, SQL, Java, C#, Bash, C++

Backend & Web: Node.js, Express, FastAPI, Spring Boot, React, Next.js, REST APIs, PostgreSQL, Redis, OpenSearch

AI & Data: PyTorch, Hugging Face, LangChain, LangGraph, MCP, RAG, pgvector, scikit-learn, Pandas, Cursor

Cloud & Delivery: Azure, AWS, Docker, Git, GitHub Actions, CI/CD, Playwright, Vitest, OpenTelemetry, Agile

Certifications: AWS Certified Cloud Practitioner, Databricks Data Engineer Associate, DeepLearning.AI Data Engineering

EXPERIENCE

Medical Informatics Engineering

May 2026 – Present

Software Developer

- Rebuilt a production healthcare compliance platform's backend from **Java 21 / Spring Boot** to **modular TypeScript** as **sole developer**, with zero breaking changes for API clients.
- Implemented **HL7 FHIR R4** EHR interoperability and regulatory exports for **8 CMS quality measures**, validated against **410 official MADiE test cases**, and reported a confirmed reference-engine defect.
- Shipped guardrailed AI assistants and read-only **MCP tools**, backed by **785 automated tests** in CI and 43 architecture decision records.

Purdue University

Sep 2025 – May 2026

Graduate Researcher, Machine Learning Evaluation

- Automated SLURM pipelines fine-tuning **25 model configurations** across five families with **LoRA, QLoRA, full fine-tuning, and 4-bit quantization** on A100 and A30 GPUs.
- Ran an evaluation suite of nearly **600 measurements**, exposing a **45.7% false-positive rate** in a widely used automated classifier versus **8.6%** for a calibrated alternative.
- Published three **first-author** works, including two SemEval-2026 system papers in the **ACL Anthology**, one **6th of 26 teams** on its subtask.

Riccle

Sep 2025 – May 2026

Product Associate

- Analyzed customer, transaction, and competitor data with **Python and SQL** to shape positioning and channel strategy, and automated GTM workflows that cut **6 hours/week** of manual reconciliation.

Medical Informatics Engineering

May 2025 – Aug 2025

Software Development Intern

- Architected a containerized **RAG platform** (Node.js, Docker, OpenSearch, Redis, PostgreSQL) with hybrid search and reranking over **3,000+** documents at **85%+ context relevance**, exposing REST, MCP, and SSE interfaces.

PROJECTS

JobOps Copilot, Deployed AI Agent Platform | [GitHub](#)

May 2026 – Present

- Built and deployed an AI job-operations platform on **Azure** with a Next.js frontend, Express/TypeScript API, and FastAPI agent service.
- Implemented **LangGraph multi-agent workflows** with tool use and RAG, improving ranking correlation from **0.716 to 0.821**.

CorvEd, Tutoring Operations Platform | [GitHub](#)

Feb 2026 – Apr 2026

- Built a full-stack operations platform on **Next.js App Router** and **Supabase Postgres** covering intake, payments, matching, and scheduling, with **Row Level Security** and PKCE OAuth.

EDUCATION

Purdue University, M.S., Computer Science, GPA 4.0

LUMS, B.S., Computer Science