

ZOE TIAN

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PROFESSIONAL SUMMARY

AI Engineer with 5+ years deploying production LLM-powered systems and agentic workflows in regulated environments. Deep expertise in Claude API, LangChain, RAG, and evaluation frameworks. Daily proficiency with AI-assisted development (Claude Code, Cursor). Pursuing MS in Computer Science at Penn while leading applied ML research. Seeking Applied AI Engineer role at an engineering-driven company building reliable, production-grade AI features.

TECHNICAL SKILLS

LLM & Agentic Systems Claude API, LangChain, LangGraph, RAG patterns, MCP servers, tool calling, evaluation & guardrails, prompt engineering, FastAPI

AI-Assisted Development Claude Code, Cursor, Codex for prototyping, debugging, architecture, production tool shipping

Machine Learning XGBoost, scikit-learn, feature engineering, SHAP, MLflow, cross-validation, A/B testing, experiment tracking, PyTorch, TensorFlow

Languages & Data Python (pandas, NumPy, scikit-learn, FastAPI, Flask), SQL, R, Bash

Infrastructure & Cloud PySpark, Apache Spark, DuckDB, AWS (EC2, S3, Bedrock), GitHub Actions, CI/CD, Docker

Visualization Streamlit, Power BI, Tableau, Matplotlib

WORK EXPERIENCE

AbbVie

Sr. Business Systems Analyst — Data & Analytics | Aug 2025 – Present | North Chicago, IL

- Deployed 3 production-grade AI tools, mapping 20,000+ manufacturing assets in real-time with Claude LLMs.
- Automated PI Tag AF Matching, reducing manual classification from 3 weeks to <5 minutes for 20,000+ streams.
- Enabled non-technical users to auto-generate Power BI documentation via GenAI assistant with guardrail prompting.
- Optimized feature store reliability for ML/analytics by authoring end-to-end data pipelines across SQL Server and OSI PI.
- Led 5-person technical squad, managing Agile delivery for AI tooling and analytics pipeline initiatives.

Genentech (Roche)

Automation & Digital Systems Engineer | Jan 2022 – Mar 2025 | South San Francisco, CA

- Built core data infrastructure (OSI PI Asset Framework) from scratch for a next-generation manufacturing facility, delivering real-time ingestion pipelines and asset templates ahead of facility go-live.
- Enabled real-time anomaly detection in GxP-regulated production by integrating high-frequency time-series data with quality systems via SQL analytical pipelines.
- Accelerated root-cause investigations across manufacturing and experimental datasets using Python and R statistical analysis, partnering with R&D and Core Engineering.
- Standardized data models across R&D, manufacturing, and engineering, accelerating ML model training pipelines organization-wide.

Bristol Myers Squibb

Process Engineer & Clinical Data Analyst | Jan 2021 – Dec 2021 | Devens, MA

- Delivered Tableau dashboards to site leadership, informing manufacturing and supply chain planning decisions through Python and R statistical analysis.
- Analyzed real-world clinical data (RWD), HEOR workflows, and biological datasets across two cross-functional rotations.

SELECTED PROJECTS

UPenn SPARC 2026

Reddit Community Analytics Platform — ML Tech Lead & PM | Jan 2026 – Aug 2026

- Developed ML system predicting Reddit post virality across 100K+ posts using XGBoost classifiers and SHAP analysis.
- Engineered NLP features (VADER sentiment, textstat readability) and behavioral features into DuckDB pipeline.
- Integrated model outputs into FastAPI + Streamlit dashboard with LLM-assisted recommendations; tracked 20+ experiments in MLflow.
- Managed team of 3 (data engineer, researcher, designer) with GitHub Actions CI/CD and production monitoring.

Personal Project

Automated Job Discovery & Evaluation Agent | Jan 2026 – Present

- Built autonomous agentic pipeline in Python using Claude APIs and GitHub Actions cron to scrape 10+ ATS boards daily and evaluate fit.
- Designed SQLite deduplication, SMTP alerts, and Streamlit dashboard for job discovery; v2 adds two-tier matching and dynamic ranking.

EDUCATION

Master of Applied Science in Computer Science

University of Pennsylvania | Expected 2028

Concentration: Data Science and Machine Learning. Coursework: Big Data Analytics, Machine Learning, Deep Learning, Applied Statistics. SPARC 2026 applied research participant.

Bachelor of Science in Chemical Engineering

University of Illinois Urbana-Champaign | Graduated 2021

Dean's List. Coursework in system modeling, computational optimization, and linear algebra.