

JOSEPH HAENEL

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Seeking relocation to the Rhein-Main or Rhein-Neckar region, Germany.

AI engineer owning enterprise AI applications and ML workflows from solution design through deployment and operation. Experienced in permission-aware retrieval, agent integrations, evaluation and production support.

TECHNICAL SKILLS

Languages: Python, SQL, TypeScript, JavaScript

AI and ML: Azure AI Foundry, Azure OpenAI, Responses API, RAG, MCP, embeddings, LightGBM, scikit-learn, PyTorch

Backend and Data: FastAPI, Flask, PostgreSQL/pgvector, Redis, Snowflake, Docker, Azure Container Apps, CI/CD, Microsoft Graph, Okta OIDC

Design and Governance: LeanIX solution designs, Alation data governance

EXPERIENCE

Dot Foods | Associate AI Engineer

May 2026 - Present

- Built and own DotChat, used by 1,000+ employees since Jan 2025, including 477 active employees over 30 days (Aug 29-Sep 27, 2026).
- Engineered queued chat execution, idempotent requests and reconnect recovery; added migration checks, controlled releases and rollback.
- Built permission-aware SharePoint RAG with delegated Microsoft Graph access, PostgreSQL and Redis; implemented resumable indexing and atomic index activation.
- Delivered an assistant-builder pilot used by 10 employees to create 15 custom assistants, with approval, version history and sharing controls.
- Added OpenTelemetry/Monte Carlo instrumentation for model and tool execution; built assistant feedback analytics with question clustering and review workflows.
- Built and deployed DotLore, a FastAPI/React knowledge-capture pilot with hybrid retrieval, evidence-linked extraction, human approval and Okta authentication.
- Own Python/Snowflake forecasting with reproducible backtests, shadow evaluations and baseline fallbacks; investigate Dagster Cloud pipeline failures during on-call support.

Dot Foods | Data Analyst

Aug 2024 - May 2026

- Built a customer-service agent with RAG/OCR, DB2, and Azure/Snowflake MCP integrations; business case estimated \$200K in annual cost avoidance.
- Developed a driver fuel optimizer using constrained-path optimization, Azure Functions, Snowflake and APIs; business case estimated \$1M+ in annual savings.
- Built Career Coach matching with weighted education/work-experience embeddings, job-data ingestion and PDF career plans; refined recommendations from tester feedback.
- Added xMatters monitoring across 200+ data pipelines, failure notifications and GitHub Actions workflows.

Dot Foods | Data Analytics and Machine Learning Intern

May - Aug 2024

- Deployed a LightGBM retention model for warehouse employees, in operational use for over a year; business case estimated \$1.5M+ in annual savings.

SIUE | Undergraduate Research Assistant

Jul 2023 - Dec 2024

- Implemented CNN models in Keras/TensorFlow for leaf-disease detection and investigated genomic associations with autism comorbidities.

EDUCATION

University of Illinois Urbana-Champaign

Expected May 2028

Master of Computer Science, in progress | GPA: 4.0

Southern Illinois University Edwardsville

Dec 2024

B.S. Computer Science | Magna Cum Laude, Honors, Provost Scholar