ROMAN SLAAP

Agentic AI Engineer | Forward-deployed delivery for enterprise clients

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Available immediately · Open to travel

SUMMARY

For me, engineering is understanding the underlying problems first. I talk to the people involved and affected, understand their issues and wishes, and only then start designing and implementing a solution. With over 8 years of experience working with large enterprises in retail, automotive and insurance, I understand how they decide, build and ship, and where and how it tends to fail. I deliver well-tested systems that other engineers can understand and work with, and that run efficiently in production through monitoring, evaluation and cost optimization.

SKILLS

LLM & Agent Systems: Agentic architecture, RAG, MCP, LangGraph, LangChain, Azure AI Search, Vector databases, Prompt engineering

Evaluation & Monitoring: LLM evaluation, Observability (Langfuse, MLflow), Model monitoring, Cost optimization

Data & ML: Human-in-the-loop ML, Automated retraining, SQL, PySpark, ETL pipelines, Databricks

Software Engineering: Python, FastAPI, API development, Authentication & authorization, System architecture, CI/CD, Docker, Git, TypeScript, SvelteKit

Cloud: Azure, AWS

EXPERIENCE

AI Engineer March 2024 - September 2026

Inter IKEA Group | Roman Slaap Data & AI Consultancy (self-employed)

- Built and managed an agentic AI platform, piloted with 40 regular users in 2 stores and reaching over 100 unique users in total, cutting the time to find the information they needed from 1 to 3 minutes of manual searching to about 30 seconds.
- Hired as the ML and generative AI expert and technical decision maker, choosing the technology stack and models.
- Built evaluation sets from user feedback, frequent questions and the questions experts deemed important to get right, and used them with observability and prompt optimization to measure response quality and improve the agent over time.
- Built a self-service platform where managers create and manage their own agents, with a dashboard that tracks the questions coworkers ask and how they rate the answers.
- Designed a modular agentic architecture connecting 8+ knowledge sources behind one interface, working with stakeholders to prioritize which sources to integrate first.
- Owned the platform and its server infrastructure end to end, keeping total running costs to about €200 a month (about €5 per regular user) while maintaining performance and reliability.

Tech: Python, FastAPI, LangGraph, MCP, Azure AI Search, Observability (Langfuse, MLflow), Databricks, Authentication & authorization, Agentic architecture, RAG

Recommendation from Global Head of AI & Tech, Inter IKEA Group, available on request.

Machine Learning Engineer & Consultant May 2022 - February 2024

Thoughtworks, Amsterdam

- Wrote 2 technical proposals for prospective clients; both became signed statements of work, leading to the Mondelez and Mercedes-Benz projects.
- Team lead for 2 junior engineers on the Mercedes-Benz project, coaching them in software and ML engineering; one became a cloud engineer at Google, the other a senior developer at Thoughtworks.
- Led the office's biweekly lunch and learn program with internal and external speakers, and organized and hosted the MLOps & Crafts meetup (2 workshops, about 50 attendees each).

- Gave the Data Mesh keynote with Thoughtworks' head of engineering at Blipz on the Radar 2022 (tech conference, Utrecht), and ran trainings for colleagues on software engineering best practices and ML engineering fundamentals.

Machine Learning Engineer April 2023 - November 2023

Mercedes-Benz (via Thoughtworks), Stuttgart (remote)

- Took a proof of concept to a production system on AWS in 6 months, giving pricing analysts near real-time competitor prices in place of manual lookups on competitor websites and in PDFs.
- Designed the model architecture and built the pipeline end to end, from gathering unstructured competitor data (websites and PDFs) through processing and modeling to automated retraining and monitoring.
- Raised car-part matching accuracy from 30% to over 90% on a hold-out test set within 2 months, using multiple rounds of analyst corrections fed into automated retraining.

Tech: Python, AWS, Docker, Human-in-the-loop ML, Automated retraining, Model monitoring, System architecture

Machine Learning Engineer October 2022 - February 2023

Mondelez (via Thoughtworks)

- Built generative and Bayesian optimization models, with Gaussian processes choosing which recipes to test next, so product experts needed fewer test rounds to optimize recipes from under 20 data points.
- Combined a generative adversarial architecture with human-in-the-loop input from experts and consumer test panels.

Tech: Python, Human-in-the-loop ML, Azure, CI/CD

Data Scientist (Pricing Analyst, then Data Scientist/Engineer) September 2018 - April 2022

Nationale-Nederlanden, The Hague

- Built models that forecast the probability and size of insurance damages (claim frequency and severity), backtested on later time periods than they were trained on (out-of-time validation), used to set risk premiums and commercial prices across multiple product lines under strict regulatory constraints.
- Automated manual processes, including contract data extraction, reducing manual effort.
- Led the Rating Engine project, designing and building an Azure-based end-to-end pricing and model management system.
- Led the data science chapter, coordinating knowledge sharing between 3 teams and 15 data scientists through regular sessions and shared coding and modeling standards.
- Built risk-premium, commercial pricing, and churn models across multiple insurance product lines using statistical and predictive modeling techniques.

Tech: Python, SQL, Azure, CI/CD

EDUCATION

MSc Computational Science, Universiteit van Amsterdam 2015 - 2018

Thesis: Agent Based Transaction Simulation, in collaboration with ING

Minor: High Performance Computing, National University of Singapore September 2016 - January 2017

BSc Artificial Intelligence, Universiteit van Amsterdam 2011 - 2015

Languages: Dutch (Fluent), English (Fluent), Portuguese (Beginner)

CERTIFICATIONS

Data Engineering Accelerated, Thoughtworks 2023

Tech Lead Development Programme, Thoughtworks 2023