

Mattias Holmgren

Kalmar, Sweden me@mattjh.sh mattjh.sh linkedin.com/in/mattias-holmgren github.com/mattjh1

Summary

Passionate, driven, and curious software engineer with a love for backend development, AI, and a recent deep dive into prompt engineering. Proficient in Python, Java, Node.js, and experienced with common frontend frameworks. Committed to continuous learning and tackling complex challenges, I have hands-on experience with AWS, SQL/NoSQL databases, and effective source control management.

Education

BSc Computer Science, Software Engineering, Linnaeus University, Kalmar, Sweden June 2018 – July 2021

- Demonstrated a commitment to excellence, receiving a prestigious scholarship for outstanding performance on my thesis.

Experience

Software Developer, tietoevry – Kalmar, Sweden August 2022 – Present

- Developed full-stack applications, deployed cloud infrastructure using AWS and Kubernetes, and collaborated on AI solutions.

Web Administrator, Botkyrka Kommun – Stockholm, Sweden July 2016 – July 2019

- Managed CMS for a SiteVision site and worked closely with external consulting partners to implement agile methodologies.

Skills

Programming Languages: Python, Java, Node.js, Go lang, Bash

Frameworks: Quarkus, Spring Boot, Next.js, NestJS, LangChain

Tools: Docker, Kubernetes, Git

Cloud Platforms: AWS (Lambda, S3, ECS/ECR, IoT Core, SageMaker)

Other Skills: SQL/NoSQL, GraphQL, Prompt Engineering, Neo4j

Projects

IoT Sensor Application, Beelab – app.beelab.se Since 2022

- Worked in a team of dedicated developers to create a fullstack application hosted on AWS for beekeepers to monitor connected beehives with advanced IoT features.

Resource Supply System Since 2022

- Created a system for an electrical components reseller that streamlines the workflow of buyers and sellers. Technologies used include AngularJS, Neo4j, AWS stack with CI/CD, Lambda functions, IoT Core, and SageMaker.

RAG + Gen AI Since 2022

- Spearheaded a Proof of Concept (POC) to establish an effective Q/A solution. Leveraged technologies like LangChain for prompt engineering, FAISS for efficient similarity search, and Chainlit for a clean frontend.

Trello Board CSV Exporter, Personal Project – github.com/mattjh1/trello-csv-exporter Since 2023

- Developed a Python-based tool to export Trello board data into CSV format. Script supports output to local directories or S3 and offers flexible configuration with ‘.env’-based API key management.

Dotfiles Setup, Personal Project – github.com/mattjh1/dotfiles Since 2023

- Created a robust and portable dotfiles setup using ‘ansible’, ‘chezmoi’, and ‘Go templates’. Automates development environment setups with support for macOS and Linux configurations.

AI Developer Tool Since 2024

- Developed a RAG (Retrieval-Augmented Generation) application that integrates ETL processes, multiple data sources, code repositories, and documentation. Fine-tuned models to handle complex, multi-part RAG queries.

gRAG Pipeline and RAG Application, Personal Project – github.com/mattjh1/gRAG Since 2024

- Integrated an advanced ETL pipeline with a RAG system. The pipeline processes various text-based formats and stores it as a knowledge graph in Neo4j. Features hybrid search capabilities and a Chainlit chat application for querying.

goETL Pipeline, Personal Project – github.com/mattjh1/goetl Since 2024

- Developed a highly performant ETL pipeline in Go for RAG (Retrieval-Augmented Generation) solutions. Supports chunked text splitting, embedding models, and integrates with databases like Redis and PostgreSQL.