



TOM HAELDERMANS

PhD · AI Engineer &
Educator

INFO

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LINKEDIN

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BORN

7 Jan 1994 · Belgian

LANGUAGES

Dutch



English



French



SOFT SKILLS

Leadership

Public speaking

Teaching

Coaching

Mentoring

Critical thinking

Problem solving

Communication

Teamwork

Perseverance

HOBBIES

running · hiking · fitness · traveling

Profile

Versatile full-stack engineer with years of production experience across multiple languages and stacks: Java and Spring, .NET and C#, and front-end and web development. Just as comfortable across cloud and infrastructure, from Kubernetes and OpenShift to Azure, AWS and Google Cloud, having designed, built and shipped complex systems end to end.

An early mover on AI, now full-time as co-founder of SmartAgents. Hands-on by conviction, building agentic systems rather than just advising on them: autonomous agents, multi-agent workflows and AI-native services built on Anthropic's Claude tooling, Claude Code and Copilot, MCP and RAG. Backed by the certifications to match, including Anthropic's Claude Certified Architect (Foundations). Years of leading, coaching and teaching engineers bring the same rigor to helping whole engineering teams adopt AI hands-on, pragmatically and securely, from foundations through to production.

EXPERIENCE

Co-founder & AI Engineer

Apr 2026 – present · full-time

SmartAgents

Hasselt, Belgium

Co-founder of SmartAgents, a Belgian AI partner building custom AI solutions through agentic engineering, delivered on our own AI platform, SmartSpace. Hands-on technical work alongside strategy, client delivery and training.

- Design and build custom AI solutions with agentic engineering, integrated into the SmartSpace platform
- Autonomous, tool-using agents and multi-agent workflows with LangChain4j, Claude and MCP, backed by RAG and semantic search
- Training that spans the full range, from AI foundations for newcomers to hands-on agentic development for engineers

Stack: Java 25, Spring Boot 4 modolith (hexagonal, DDD, railway-oriented), GraalVM native · TypeScript, React, Vite, Turborepo

AI: Agentic engineering with LangChain4j · Claude, Gemini, GPT · MCP tools · RAG (pgvector, semantic search)

Cloud: Google Cloud (Cloud Run, Neon Postgres, Firebase Hosting, Secret Manager, KMS) · Terraform · Docker · Auth0

Senior Consultant, AI & full-stack

Jan 2026 – present · freelance / hybrid

Cegeka

Hasselt, Belgium

Full-stack development in a multidisciplinary team at Cegeka, across two separate projects. The first is the rollout of an agentic AI platform that lets users configure custom agents with MCP tools, prompts and RAG against Azure OpenAI and Azure AI Search. The second is an event-driven .NET backend on Microsoft Azure with a web-components frontend. Hands-on delivery in both, shipping AI capabilities into production rather than stopping at prototypes.

Stack: .NET 10 / C# 14, ASP.NET Core (Minimal APIs), SignalR, Azure SDK · Web components, design tokens · xUnit, FluentAssertions

Azure: Service Bus, Cosmos DB, Table Storage, Entra ID, Key Vault, Container Apps, Application Insights, Static Web Apps

AI: MCP, RAG, Azure AI Search, Azure OpenAI, prompt engineering, GitHub Copilot

Architecture: Event-driven, vertical slices, CQRS, DDD, railway-oriented programming

Team Lead

Feb 2021 – Jan 2026 · 5 years · freelance / hybrid

Ravago

Arendonk, Belgium

Software Engineering Team Lead

Jan 2024 – Jan 2026

Led and coached multiple teams through the full software lifecycle, mentoring engineers day to day through code reviews, pairing and knowledge-sharing while contributing hands-on to development and driving architectural decisions in line with business goals. Agile working with Jira, Confluence and Miro.

Software Engineer

Feb 2021 – Jan 2024

Designed and implemented complex backend systems and data-integration solutions within the digital team, including a dynamic pricing rule engine and several ETL pipelines feeding downstream business systems.

Stack: Java 8–25, Spring Boot 2–4 (Data, Web MVC, Cloud, Security), JPA/Hibernate, RESTful APIs

Data & messaging: DB2, Liquibase, Elasticsearch, Kafka (Confluent), IBM MQ, JMS

Security & identity: Spring Security, OAuth 2.0, JWT, SAML, Okta

DevOps & quality: OpenShift, Kubernetes, Docker, Jenkins, Argo, GitHub Actions, Nexus, Terraform · Dynatrace, Kibana · JUnit, Mockito, Wiremock, SonarQube, PIT, Pact

Architecture & modeling: CQRS, Microservices, Event-driven, TDD, BDD, SOLID, Clean Architecture, DDD · ArchiMate, PlantUML, OpenAPI/Swagger, draw.io

Projects: Search & consult applications · Certificate generation portal · Transactional communication system (event-driven, Unleash, Customer.io) · Dynamic pricing engine (Drools, Hazelcast, SSE, Angular, AOP, DDD) · ETL solutions (Spring Batch, Contentful, Teamdesk)

Teaching Assistant, Industrial Engineering

Sep 2021 – Aug 2024 · part-time

UHasselt

Diepenbeek, Belgium

Taught during the PhD and continued as a teaching assistant afterwards: lectures, lab and exercise sessions, project guidance and bachelor's/master's thesis supervision, regularly breaking complex technical material down for mixed-ability groups.

TRAINING & ENABLEMENT

A consistent thread across every role is teaching engineers and levelling up teams: lecturing and thesis supervision at UHasselt, day-to-day mentoring and coaching as a team lead at Ravago, and structured AI training at SmartAgents, from foundations for newcomers to hands-on agentic development for working engineers. The focus is structured programmes, not one-off talks: taking whole engineering teams from AI foundations to secure, hands-on day-to-day practice. Comfortable across lectures, hands-on workshops, code-along sessions and 1:1 coaching, and used to pitching the same material up or down for the room.

AI Foundations

Demystifying LLMs, prompting and where AI genuinely fits, for mixed and non-technical audiences.

AI-Assisted Development

Working effectively with Claude Code and GitHub Copilot inside real codebases.

.NET & Cloud-Native

ASP.NET Core on Azure, containers and Kubernetes / OpenShift.

Agentic Engineering

Autonomous and multi-agent systems with Claude, MCP, RAG and LangChain4j, with guardrails and secure-by-design agents.

Modern Java & Spring

Spring Boot architecture withDDD, CQRS and event-driven design.

Engineering Practices

TDD/BDD, clean architecture, and a healthy code-review and pairing culture.

EDUCATION

PhD in Industrial Engineering

UHasselt · IET InnoEnergy

Taught and supervised undergraduate engineering students alongside doctoral research.

Oct 2016 – Feb 2021

Hasselt, Belgium

Postgraduate AI Technical Architect

Hogeschool PXL

Sep 2023 – Jun 2024

Hasselt, Belgium

Java Developer

Syntra

Sep 2018 – Jun 2020

Genk, Belgium

MSc Industrial Engineering, Magna cum laude

UHasselt

Sep 2012 – Jun 2016

Hasselt, Belgium

CERTIFICATIONS

Capable Academy with Yves Goeleven

Bi-weekly architecture challenges · AI-native & agentic engineering, MCP, RAG, modern Azure architecture · Mar 2025 – Dec 2025

Claude Certified Architect - Foundations

Anthropic · Apr 2026

Building with the Claude API

Anthropic · Apr 2026

AWS Certified Developer (Associate)

DVA-C01 · Nov 2020

Oracle Certified Professional, Java SE 11

1Z0-815 & 1Z0-816 · Sep 2020

Model Context Protocol: Advanced Topics

Anthropic · Apr 2026

Certified Kubernetes Application Developer

LF-m83matixwb · Sep 2021

Pivotal Spring 5.0 Certified Professional

EDU-1202 · Oct 2020