



# David Carlos Zachariae

Hello, I'm David, a Full Stack Developer and AI Engineer with over 8 years of experience building scalable applications and AI solutions. I specialize in developing robust backend systems Java and C#, creating responsive frontend applications with Angular and NextJS, and AI solutions using Python. My expertise in Large Language Models (LLMs) and Retrieval-Augmented Generation (RAG) systems has led me to share my knowledge through talks at industry conferences.

I'm particularly passionate about AI and frontend development, where I combine technical with creative problem-solving. As a lead developer and scrum master, I've successfully delivered multiple projects while mentoring team members and fostering a collaborative environment.

Beyond coding, I'm an active member of the tech community, regularly participating in conferences and meetups. I enjoy sharing knowledge through technical talks and workshops, particularly on topics related to AI and modern web development. I believe in the power of collaboration and am always eager to connect with fellow developers and tech enthusiasts.

## About me

### Adaptable and Passionate

With over 8 years of experience as a programmer, I pride myself on my flexibility and quick learning ability, especially when adapting to new programming languages and frameworks. My capability to swiftly gain expertise in various domains has been a key strength throughout my career.

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See [dzach.dev](https://dzach.dev) for website version

During my tenure at Trifork, I have gained significant experience in using Scrum, leading to my certification as a [ScrumMaster](#). One of my greatest strengths lies in my adaptability, always being ready to embrace new challenges and technologies.

## Generative AI and Retrieval Augmented Generation (RAG)

I have always been fascinated by generative AI, and in line with recent trends, I have developed a strong interest in Large Language Models (LLMs). This interest has led me to closely follow advancements in the field and familiarize myself with more advanced concepts such as Retrieval Augmented Generation (RAG), Vector Databases, and Reranking.

Much of my spare time is dedicated to experimenting with new frameworks and exploring the development of innovative products. Additionally, I have conducted several talks on this subject for students and other interested individuals and conferences or meetups.

## Spare Time

I have a variety of interests that help me relax besides coding. These include playing video games, walking our dog, running, and enjoying a beer with friends or colleagues.

Fostering a friendly and social work environment is important to me, often leading me to help organize events like Friday bars and other social gatherings with my colleagues. I also have a passion for making coffee and cocktails, which often can get a bit nerdy.

## Personal Life

I'm 31 years old and live in Brabrand, Aarhus with my girlfriend of five years and our dog Ruby. I've lived in Aarhus most of my life, with longer stays in the Netherlands and Australia.

# Skills

With extensive experience in frontend development, I have achieved expert-level proficiency in Angular and TypeScript, complemented by substantial experience with NextJS. My backend expertise is anchored in Java development, particularly with the Quarkus framework, and I maintain strong capabilities in Python programming. In the domain of artificial intelligence and machine learning,

I have developed significant expertise working with GenAI both professionally and in my spare time. This includes building production AI Applications using Python frameworks like FastAPI, Llamaindex and LangChain, with a particular focus on Retrieval Augmented Generation (RAG) pipelines. This has also led me to giving multiple talks about the subject at conferences and meetups.

My professional experience extends to cloud platforms, with demonstrated proficiency in both Google Cloud Platform (GCP) and Azure Cloud services.

Additionally, I bring valuable experience in DevOps practices and microservice architecture, along with a strong foundation in clean code principles. My role as a Scrum Master has further enhanced my ability to lead and coordinate development teams effectively.

Programming Languages	Frameworks	Other skills
Typescript (+8 years) Java (+5 years) Python (+5 years) C# (+2 years)	Angular (+8 years) Quarkus (+3 years) NextJS (+2 years) Llamaindex LangChain FastAPI	Scrum Master Retrieval-Augmented Generation Micro Service Architecture GCP Azure Cloud Clean Code Principles Vector Databases

# Work experience

2023-present

Trifork A/S

## Lead Developer, Scrum Master & Lead AI Developer

In 2023 my role was expanded to include working as Lead Developer and Scrum Master on multiple projects. This has also included multiple AI project which has involved building production ready GenAI applications.

2019-2023

Trifork A/S

## Full Stack Developer

Since 2019, I have worked at Trifork A/S as a software developer, which is referred to as Software Pilot. My work there has involved all facets of development: Backend development with Java (Microservices, REST, Quarkus, etc.), Frontend development in Angular, DevOps (Jenkins, Openshift, Bash scripting). The projects I've worked on have also made me very familiar with Scrum and the benefits of planning and refining features in order to achieve better end products.

2016-2019

Uniwise ApS

## Student Developer

My first job as a student programmer was at Uniwise as a frontend developer, working on the WiseFlow platform for digital education. In this job I primarily worked with: AngularJS, React, JQuery

2015-2016

Uniwise ApS

## 2nd level support

During the second year of my studies, I worked as supporter for 2nd level customers on the WiseFlow platform.

2012-2015

Rambøll Management

## Interviewer

During my sabbatical as well as the first years of study, I worked as an interviewer conducting interviews over the phone.

2011-2012

Restaurant Casablanca

## Dishwasher

My first job was as a dishwasher at Casablanca in Aarhus.

# Education

2017-2019

Aarhus University

## Master's Degree, Computer Science

In 2019 I completed my Master's degree in Computer Science at Aarhus University. I specialized in ML/NLP and Functional Programming. My thesis concerned the use of Recursive Neural Networks for complex semantic detection in Emails.

2018-2019

Radboud University, Nijmegen

## Exchange Semester

For my studies i took an exchange semester at Radboud University, Nijmegen in the Netherlands. The focus was on ML with courses like Bayesian Networks, Information Retrieval and Statistical ML

2014-2017

Aarhus University

## Bachelor's Degree, Computer Science

In 2017 i completed my bachelors degree in Computer Science at Aarhus University.

2009-2012

Aarhus Katedralskole

## Almen Studentereksamen STX (Music, English, Psychology)

In my younger years I played a lot of music, which was reflected in my choice of education at Aarhus Katedralskole STX.

# Languages

In addition to my native language, Danish, I am fluent in English, a skill honed through stays in Australia and the Netherlands.