

# CV

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## Introduction

I love the craft of software development. My experience includes designing everything from individual features to complete platforms in domains from waste management to payment processing.

I have a strong background in Java, with extensive recent experience in migrating Java applications to AWS based microservices. I have been involved in the design and implementation of all steps of the process, from porting code to Spring Boot, implementing CI workflows, and training developers in the use of the new tools and restrictions provided by the cloud.

On a personal level, I'm an extrovert and I get along well with people. My Computer Science degree, and diverse background, help me get up and running quickly in new projects, and eventually take the lead. I also enjoy learning from others and teaching them what I know.

## Education

1995-2006: M.Sc. In Computer Science from DIKU, Copenhagen University

## Certification

2018: AWS Certified Solutions Architect - Associate

## Work- and project experience

### UFST ICE Project (April 2020 – current)

External Consultant

**Role:** DevOps

**Description:**

I was instrumental in the design and rewrite of the Terraform platform from the “old stack” to the “new stack”, both in formulating the performance requirements, teaching new developers the architecture, and developing most of the core AWS modules.

I inherited the automated deployment process, and finished the scripting and Jenkins pipeline setup needed to automate what had previously been a manual process for years. As part of this work, I also wrote the proposal and reference implementation for the integration testing framework used by the teams to validate the success of each deployment.

As part of my work I wrote extensive documentation that was used by all the other DevOps engineers, both for testing and accessing AWS resources with ADFS credentials. The tools and workflows I introduced replaced the existing solution of using a bastion server in the environments to work from, with a workflow based on the developers’ own machines.

**Experience:** Terraform, Amazon Elastic Container Service (ECS), AWS API Gateway, Docker, Bash, Jenkins

### Novozymes (October 2019 – March 2020)

External Consultant

**Role:** DevOps

**Description:**

I helped rewrite the first iteration of Novozyme’s AWS analytics platform. The work involved analyzing the existing work, and streamlining or reimplementing the platform in a more maintainable and extensible form.

As part of the job, I rewrote their Terraform platform almost completely and implemented a system for one-click (re)deployment of environments, and repeatable integration testing of central modules.

I introduced new tools and workflows for working with Terraform and AWS using scripting to facilitate automation.

**Experience:** Terraform, Amazon Elastic Container Service (ECS), Docker, Ansible, Bash, Node.js, Jenkins

## JP/Politiken (March 2019 – September 2019)

External Consultant

**Role:** Architect, Developer

**Description:**

I designed and implemented a microservice platform based on Amazon Elastic Container Service (ECS), and helped migrate the customer's existing code from Java OSGi to Spring Boot. The entire platform was provided with Platform as Code using Terraform. A secondary responsibility was to help the customer's IT department find a way to work together with the new platform across teams. I also provided example applications for monitoring and management written in Spring Boot and React JS.

**Experience:** Terraform, Docker, Amazon Elastic Container Service (ECS), Spring Boot, Node.js, React JS, TeamCity, Octopus

## KeyCore / IBA (April 2018 – December 2018)

External Consultant

**Role:** Architect , Developer

**Description:**

Along with one other architect from KeyCore, I helped migrate the IBA's insurance sales platform from a single server hosted solution to a cloud native AWS application based on a mix of microservices and traditional web applications. My primary responsibility was migrating services to Spring Boot microservices in Docker, and to build CI pipelines for test and deployment. I also wrote integrations that allowed developers to monitor and control deployment via Slack.

**Experience:** TypeScript, Docker, Amazon Elastic Compute Cloud (EC2), Slack, Node.js, Amazon Elastic Container Service (ECS), Amazon CloudFormation, AWS Lambda, CodePipeline, CodeBuild, CodeDeploy

External Consultant

**Role:** SCM Consultant

**Description:**

As part of the cloud migration effort, I travelled to Rumania on several occasions, to migrate the customer's Mercurial repositories to GitHub, and train the developers in the daily use of Git and the GitFlow process.

**Experience:** GitHub, Mercurial, GitFlow

## Netcompany / KOMBIT (January 2018 – March 2018)

External Consultant

**Role:** Developer

**Description:**

I worked for KOMBIT on FLIS, a government platform for exchanging performance data between municipal leaders. My work dealt mostly with testing and optimizing in-house tools.

**Experience:** Microsoft SQL Server Integration Services (SSIS), C#, Microsoft SQL Server

## .NET department manager, Theilgaard Mortensen (May 2015 – December 2017)

.NET department manager

**Role:** Manager

**Description:**

I managed the .NET department, consisting of 3 consultants. My team delivered both ad hoc development at hourly rates and an in house developed electronic patient journal system used by the Danish Government.

As manager, my main focus was on improving the quality of deliveries on our EPJ product. I introduced code reviews and mandatory unit testing, and worked with support to standardize integration testing prior to releases.

**Experience:** Code review, Continuous Integration, Integration Testing, Unit Testing

## Self-service modules for EPJ system

**Role:** Systems Developer, Web Developer

**Description:**

I was the lead developer on the implementation of self-service modules for the EPJ system that integrated with NemLog-In.

**Experience:** Angular2, ASP.NET MVC, Bootstrap, C#, HTML5, Web services, OIOSAML.NET, SAML, SSO, NemLog-In

## Electronic patient journal system (EPJ)

**Role:** Architect, Team lead

**Description:**

I served as team lead and architect for the team that maintained TM's EPJ systems for child dental care, post-natal healthcare, and the Copenhagen dentist school. The child dental care system alone had more than half of the Danish municipalities with every child in them as customers. The back-end was Java based and the front-end was a C# WinForms application.

**Experience:** C#, EPJ, GEPI, Java, VB.NET, Web services, WinForms

#### Waste management portal

**Role:** Consultant, Systems Developer, Team Lead, Web Developer

**Description:**

I maintained waste management self-service portals for ISS and Novo Nordisk.

**Experience:** ASP.NET MVC, C#, HTML5, jQuery, MS Reporting Services, Web services

#### Quality control

**Role:** Architect, DevOps

**Description:**

I developed and introduced Docker/DropWizard middleware to ensure that only tested code would make it into the main product branches, and to link auto generated change logs with the issue tracking system.

**Experience:** CruiseControl.NET, Java, Jenkins, Docker, Drop Wizard, Target Process, Web services

#### Architectural review

**Role:** Architect, Systems Developer

**Description:**

I served as the main architect for most department projects, and I performed overhauls of the Java based back-end server's architecture, to replace homemade components with stock components from the Open Source community. The process helped reduce maintenance costs.

**Experience:** Bitronix JTA, Guava, Java, JAX-RS, Lombok, Web services

#### Log and server monitoring

**Role:** Architect, DevOps

**Description:**

I prototyped log- and server monitoring of our client solutions.

**Experience:** Docker, GrayLog, Nagios, NSClient, NXLog

#### Systems developer, Endomondo (January 2015 – April 2015)

##### Endomondo application back-end

**Role:** Systems Developer, Web Developer

**Description:**

I worked on the back-end used by the fitness app and the website during the transition from an Apache Wicket application to an OSGi/AngularJS solution deployed in AWS.

**Experience:** AngularJS, Apache Wicket, AWS, Java, OSGi, Web services

#### Unit testing

**Role:** Systems Developer

**Description:**

I rewrote the older parts of the backend to support unit testing.

**Experience:** JUnit, Mockito

#### Architect, DIBS (July 2010 – December 2014)

##### New Payment Gateway

**Role:** Architect, Team Lead, Systems Developer

**Description:**

I designed and prototyped a platform built around horizontally scalable servers deployed in Amazon's AWS cloud. The system used event sourcing and the CQRS pattern to share the load of processing payments, while simultaneously feeding a business back-end.

The final system was based on Axon CQRS and Redis, but during development both ActiveMQ and Riak were in play.

**Experience:** Apache ActiveMQ, Axon CQRS, AWS, MySQL, Redis, Riak, Spring, Web services

#### Server throttling

**Role:** Architect

**Description:**

I designed, and helped implement, a configurable rate limiting proxy to during a hectic Christmas when the servers were buckling under the load. The system was conceived, developed and deployed over 48 hours, and was still in use 2 years later when I left.

**Experience:** Node.js, Redis, Web services

#### Systems developer, Eniro (March 2008 – June 2010)

##### Support tool

**Role:** Systems developer

**Description:**

I took responsibility for the in-house front-end used by the customer service department, streamlined the build process, and rewrote the application to use dynamic model binding.

**Experience:** Java, Java Webstart, Swing, Web services

#### Data integration

**Role:** Systems developer

**Description:**

I worked on the core data exchange collecting data from multiple sources and exporting them to the head office, providing data for both the websites and the print division.

**Experience:** Batch Processing, Java, J2EE 1.5, Web services

#### B2B master data portals

**Role:** Systems developer, Web developer

**Description:**

I worked on several portal sites for B2B projects for the Swedish head office.

**Experience:** Java, jQuery, Freemarker, OAuth 1.0, Spring, Web services

#### Consultant, Theilgaard Mortensen (March 2006 – February 2008)

##### Lotus Notes integration

**Role:** Systems developer, Web developer

**Description:**

I designed and developed an integration layer that allowed data from an external data warehouse for Business Denmark.

**Experience:** J2EE 1.5, Web services

##### Bogportalen and Gyldendals Bogklubber

**Role:** Systems developer, Web developer

**Description:**

I developed e-commerce sites for a number of major Danish companies including Gyldendal.

**Experience:** J2EE 1.4, WebSphere Commerce, Web services

## Work experience

Skill level description:

1. I've worked with this, but I'm rusty
2. I can maintain existing solutions
3. I can work confidently from scratch or existing code
4. I can teach others
5. The subject is a core competence

Technology	Last Used	Total Years	Skill
Amazon Web Services (AWS)	2021	11	4
ASP.NET MVC	2017	3	3
Bash scripting	2021	9	5
Bootstrap JS	2019	9	3
C# / .NET	2018	3	3
Continuous Integration	2021	11	4
CruiseControl.NET (CI)	2017	3	3
Docker	2021	6	5
EPJ (Elektronik Patient Journal)	2018	3	4
Git	2021	10	5
HTML5	2019	9	4
Integration testing	2021	11	4
Java (all versions)	2019	14	5
Java Swing	2010	3	3
JavaScript / JS	2019	12	3
JAX-RS	2019	5	4
JAXB	2019	9	4
Jenkins/Hudson	2021	10	4
jQuery	2015	5	3
JSON	2021	11	5
LINQ	2018	3	3
Linux	2020	14	4
Microservices	2021	6	5
Microsoft IIS	2017	3	3
Microsoft SQL Server	2019	4	3
MySQL	2015	8	3
Nagios	2019	4	3
Node.js	2020	5	3
React JS	2019	1	3
REST	2019	9	5
SOAP / WSDL	2017	12	4
Spring / Spring Boot	2019	9	4
SQL / TSQL	2019	14	5
Subversion / SVN	2018	6	3



Swagger / OpenAPI	2019	4	4
TeamCity (CI)	2019	1	3
Terraform	2021	3	5
Terragrunt	2021	2	4
Tomcat	2018	11	4
TypeScript	2018	1	3
Unit Test	2019	10	4
Web	2020	14	5
Web Services	2019	12	5
WSDL	2017	12	4
<b>Technolgy</b>	<b>Last Used</b>	<b>Total Years</b>	<b>Skill</b>