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Summary

I am a recent Master's graduate in Computer Science, and having defended my master's thesis with honors, I am now looking to step into a formal role where I can apply my coding- and academic skills in an area that matters.

In the last several years, I have increasingly been getting involved in complex projects in fields, I haven't necessarily worked with before. In particular, I thrive with tasks related to research, development and problem solving, and I make an effort of delivering tangible and quantifiable results.
My practical experience shows this, by having a 100% implemented success rate of products in both student jobs and academic projects, always backing up my results with data and benchmarks.

As a person I am outgoing and sociable, and I enjoy contributing to my workplace professionally as well as socially, in example by arranging after-hours social events.

I am looking forward to becoming part of a talented team of highly capable colleagues in a high skill ceiling environment, where I can partake in solving high complexity tasks, as well as hone myself professionally by learning from the best.

Professional experience

Backend developer at June by Danske Bank *(March 2017 – February 2019)*

- Primary responsible the current design and implementation of our image recognition engine, which is used for verifying customer identity documents during our customer onboarding *KYC*[1] process, increasing from 56% to ~92%.
- Responsibility for developing a document rendering engine in use for generating contracts and other legal documents during customer onboarding and fund transactions.
- Development of tools for our Quality Assurance division.
- Currently part of the ongoing feature developments in June, where I do software implementation, code reviews, and partake in sprint planning- and ticket grooming sessions.

At June, my primary tools have been C#, Python, OpenCV, Tesseract OCR, LaTeX, Docker, Elm and Node.js

Full-stack-udvikler at Eksponent *(March 2016 – March 2017)*

- Consultant with responsibility for implementing and deploying C#/Umbraco web projects for customers. Tasks included C#/HTML/CSS programming, setting up Azure server configurations and designing and deploying continous integration pipelines with automated testing, by the means of Octopus and Travis.
- Sole contact between company and customer, having also represented Eksponent in customer meetings.

At Eksponent, my primary tools have been C#, Umbraco, MSSQL, Azure, Travis and Octopus.

[1] Know Your Customer; in other words the step of verifying a customer's identity.

Teaching Assistant at The University of Copenhagen *(September 2017 – November 2017)*

- Teaching assistant on the *Advanced Programming* master's course, where I have had the responsibility for preparing and hosting weekly lab sessions for my assigned class of students, in addition to correcting, grading and giving feedback on weekly assignments.
- The role included final grading of the *Advanced Programming* exam submissions.

In *Advanced Programming*, I taught the languages Haskell, Prolog and Erlang.

Education

MSc in Computer Science at The University of Copenhagen *(August 2016 – January 2019)*
During my master's program, I have focused on courses covering compilers, logic, semantics and type theory, and functional and parallel programming, including GPGPU[2] programming.

For my thesis *FShark: Futhark programming in FSharp*[3], my two biggest contributions was the design and implementation of a C# backend for the Futhark compiler, and the design and implementation of an F#-to-Futhark transpiler. The C# backend has since become part of the official Futhark compiler, and is now enabling developers to effortlessly integrate high-performance GPU powered computational kernels in standard .NET projects.

My thesis was given the grade *12* at the defense, corresponding to an A on the international ECTS scale.

BSc in Computer Science at The University of Copenhagen *(August 2012 – June 2016)*
For my finishing bachelor's project, I extended the Futhark language with type aliases, and described a complete design for implementing ML-style higher-order modules.

General Certificate of Secondary Education (STX) at Viborg Gymnasium & HF *(Finished 2010)*
With a focus on social sciences, English and mathematics.

Skill summary

Here follows a summary of the languages and technologies that I am experienced in, and can confidently work with:
APL, Bash/Linux, Assembly, C, C++, C#, CUDA, Elm, Elixir, F#, Go, Haskell, Java, JavaScript, Matlab, Node.js, Numpy, OpenCL, OpenCV, Python (2 & 3), Standard ML, SQL and Tesseract OCR.

Amazon Web Services, Azure, Benchmarking, DSL design and -implementation, Docker, functional programming, Git, GPGPU programming, Jenkins, Octopus, SCRUM/agile development, Test-Driven Development, Travis, parallel programming, property-based testing og project management using Jira.

I am a competent English speaker and -writer, and am used to work in an international environment.

About me

I have been a political activist since 2009, working with both student-, LGBTQ- and national politics, and I am currently a member and the treasurer of Enhedslistens Queer Committee.

My spare time is spent on my friends and hobbies: I have large interest in music, and I play guitar and bass at the amateur level. In general, I love using the city and it's nightlife, and I am an avid concert- and cinema-goer. I have spent my time on student revues for the last five years, primarily as a writer and director, but also on-stage as a singer/actor.

Finally, I also enjoy cycling, video games and cooking.

[2] General Purpose Graphics Processing Unit
[3] `https://futhark-lang.org/student-projects/mikkel-msc-thesis.pdf`