

CV

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I'm a Master's graduate in Software Engineering (MSc) at Aalborg University (AAU). My programming journey began at 16, and I've since gained hands-on experience in many areas, from firmware development to web development to programming language theory. I love programming language theory, especially type systems and static analysis, and enjoy exploring how different paradigms influence software design (currently love functional programming). I'm eager to use my technical skills, theoretical knowledge, and passion to solve real-world software challenges.

Selected Competencies

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| • System programming
Rust, C/C++ | • Deployment
Docker (Swarm), Docker Compose | • Project management
Scrum, Git |
| • Functional Programming
Haskell, OCaml, Rust | • CI/CD
Github Actions, Gitlab workflows | • Microservices & SOA
REST API, Docker Swarm |
| • Desktop Linux
Bash, Systemd, SSH | • Embedded programming
C/C++, Arduino, firmware | • Language theory
Static analysis, type systems |

Education

Sep 2023 –
Jun 2025

Master of Science (MSc) in Engineering (Software), Aalborg University (AAU)

- Designed, developed, and deployed larger, multi-service architected systems.
- Low-level communication protocol design and implementation for ad-hoc dynamic mesh networks.
- Language safety and static analysis research and implementation.

Master's thesis: *"Enforcing Memory Safety in Modern C++ Through a Safe Subset and Static Analysis"*

- Defined a modern, conservative, and safe subset of the C++ language.
- Implemented Rust-like static analysis for the subset, to ensure safety at compile time.
- Analysis implemented as a Clang plugin in C++.

Sep 2020 –
Jun 2023

Bachelor of Science (BSc) in Engineering (Software), Aalborg University (AAU)

- Advanced design and development of software systems.
- Engagement in several projects, including multi-team collaborations, using various agile development methods.
- Semester projects in various areas of software engineering, from web development to firmware to language implementation.
- Gained theoretical knowledge and practical use of it through exercises and the semester project.

Bachelor's thesis: *"Reverse Engineering PLCs into Ladder Programs: A Model Learning Approach"*

- Developed a system that, using model learning, can reverse engineer (and potentially optimize) the running code on PLCs in ladder logic.
- Tested and benchmarked on different algorithms on real hardware, determining the best suited algorithm for the task.
- Project consists of multiple services, written in Java and C#.

Work Experience

May 2026 – Now	XCI A/S Software Developer at XCI in Aalborg, working on the lower-level, high-speed components for fast data processing. C/C++, Kafka, Elasticsearch, teamwork
Sep 2025 – April 2026	Trifork A/S Software Pilot at Trifork A/S in Aalborg, working with real-time programming and data processing. C/C++, Rust, Flink, Kafka, Elasticsearch, teamwork
Jan 2025 – Jun 2025	Trifork A/S Student developer at Trifork A/S in Aalborg, working with real-time programming and data processing. C/C++, Flink, Kafka, Elasticsearch, teamwork
Nov 2024 – Jun 2025	Aalborg University Student developer at Aalborg University, working on a tool written in Haskell to parse, interpret, and analyze RISC-V assembler code. Haskell, parsec, RISC-V, solo development
Sep 2023 – Dec 2023	Product Owner for 5th semester Software multiproject Product owner for the multiproject on 5th semester Software, consisting of six groups with about six members in each group. Scrum, manager
Fall 2022, Fall 2024	Teaching Assistant Teaching Assistant in the Imperative Programming course on the 1st semester of the Bachelor's program. Later, in the Programming Paradigms course on the 1st semester of the Master's program. C, Haskell, teaching
Jun 2022 – Mar 2024	Aalborg University, DEIS Student Software developer at DEIS on the Ecdar project. Primarily working in Rust in the backend model checking engine (Reveaal), but also contributed to the other parts of the project. Rust, model checking, teamwork
Jan 2022 – Jun 2022	RTX A/S Student assistant at RTX A/S in Nørresundby, with both hardware and software tasks. C#, WPF, soldering

Other Experience

2021–2024	Tutor at AAU I've participated in the tutor corps for the Software bachelor program every year throughout my studies. In 2021, I was a normal tutor. In 2022 and 2024, I was a tutor planner, where I planned, fundraised, and executed social events for the new students. In 2023, I was the tutor coordinator, managing the corps and its funds, along with the same responsibility as a planner.
2021–2024	UNF Game Development Camp I've volunteered at UNFs Game Development Camp. During these camps, I've had a few different responsibilities, such as programming teaching assistant, and technical manager.

About me

In my sparetime, I enjoy staying active through lifting weights or bike cycling, which helps me clear my mind and stay focused, fit, and calm. It's a great way to challenge myself and set new goals, both physically and mentally.

I also love watching different movies, series, or playing story-driven games, it's a great way to relax and get lost and invested in different stories.

Additionally, I enjoy discovering and trying different programming language concepts, primarily in the functional programming realm. I like to do small coding exercises, and the occasional side project, it helps me stay active development-wise