

CV

Thomas Krogh Lohse

📍 Aalborg Øst 9220, Denmark

📞 +45 51 16 41 99

📧 @t-lohse

📧 @tlohse

✉️ mail@tlohse.dk

🌐 thomas-lohse

🔗 tlohse.dk

I am a Software Engineering Master (MSc) student at Aalborg University (AAU), where my fascination with programming has taken me, on my journey of independent learning since the age of 16. My interests span software development theory, and I've dabbled in backend and system development, gaining hands-on experience in firmware development and task automation using shell-scripts. What truly captivates me is exploring the nuances and constructs of different programming languages, giving me insight in what is best suitable for different problems (Currently love functional programming). This mix of theoretical knowledge and practical skills aids my journey in the dynamic world of software engineering.

Technical Competencies

Language	Since	Level	Tool	Since	Level	Additional	Since	Level
Haskell	2023	8/10	Cabal	2023	7/10	CI/CD	2022	8/10
Kotlin	2022	8/10	Docker	2021	7/10	SCRUM	2022	8/10
Java	2022	8/10	Cargo	2021	8/10	REST API	2021	7/10
Rust	2021	9/10	Linux	2020	8/10	Embedded	2019	7/10
Bash	2020	7/10	GitHub	2018	9/10	Projects	2017	9/10
C/C++	2020	7/10	Git	2018	9/10	Programming	2017	9/10
C#	2017	8/10	.NET	2018	7/10			

Education

2023–Now

University (Master)

Attendee at Aalborg University, studying Software Engineer, Master. The following describes the project from each semester (* is the current):

1st Engineered an online learning platform for introductory programming, with multiple services, for example a REST API, frontend, and a separate service for executing code. The project was deployed with Docker Swarm, and written in TypeScript.

2nd Designed and implemented a protocol for ad-hoc dynamic mesh networks, and utilized it in an app for sharing users' location with selected "friend users" in this network, by sending Bluetooth advertisements with the data. The project was developed for Android devices, and written in Kotlin.

***3rd (Master's preliminary thesis)** Will work with safety in C++ through static analysis.

2020–2023	<p>University (Bachelor) Attendee at Aalborg University, studying Software, Bachelor. The following describes the project from each semester:</p> <ul style="list-style-type: none"> 1st Developed a workscheduling system for the production teams at Siemens Gamesa (Written in C). 2nd Implemented the Signal Protocol in an IoT environment (Written in JavaScript). 3rd Developed a program for better handling of Siemens Gamesas turbine blades' location and production (Written in C#). 4th Developed a programming language as a replacement to the shell scripting language Bash (Written in C#). 5th A multiproject, where six groups collaborated on the same code base (Written in Rust). 6th Developed a model learning tool to reverse engineer the source code from PLCs in ladder logic (Written in Java and C#).
2017–2020	<p>High School High school attendee for three years at Aalborg Techcollege (AATG), and recieved the Higher Technical Exam (HTX), with a specialised Study Area in <i>Communication & IT A</i>, <i>Programming B</i>, and technical study in <i>Technical Science A</i>.</p>

Employment

Fall 2022	<p>Teaching Assistant I am a Teaching Assistant in the Programming Paradigms course on the 1st semester of the Masters in Software, Computer Science, and Data Science at AAU. The course primarily deals with functional programming in Haskell, where I help with teaching and the exercises.</p>
Fall 2023	<p>Product Owner for 5th semester Software multiproject I was the overall product owner for the multiproject on 5th semester Software, consisting of six groups with about six members in each group. The project was 15 ECTS points. My responsibility included creating the tasks that should be implemented by them, answering questions regarding the code base and tasks, and generally acting as a guidance on the project, and as a PO.</p>
Fall 2022	<p>Teaching Assistant I was a Teaching Assistant in the Imperative Programming course on the 1st semester of Software and Computer Science at AAU. This is the first programming course you have on the educations. I had to help students during exercise sessions, provide feedback on their hand-in assignments, and collaborate with the course lecturer regarding the exercises, platform, and hand-ins.</p>
2022–2024	<p>Aalborg University, DEIS I worked as a Student Software developer at DEIS on the Ecdar project where I developed mainly in Rust in the backend engine for model checking (Reveaal), but also contributed to the other parts of the project.</p>
2022	<p>RTX A/S I worked as a student assistant at RTX A/S in Nørresundby, with both hardware and software tasks, consisting of soldering og assembling equipment, along with developing platforms for monitoring and testing of larger devices/components.</p>

Other Experience

Fall 2023	<p>Tutor Coordinator</p> <p>I volunteered as a tutor coordinator for the students in 2023, studying Software at Aalborg University. I was responsible for planning and organizing the tutor planners, making sure that they were on track with planning, fundraising, and executing their events, along with a few events I had to plan as well. I was also responsible for handling the finances of the organization, which included sending and paying invoices and budgeting.</p>
Fall 2022, 2024	<p>Tutor Planner</p> <p>I volunteered as a tutor planner for the students in 2022 and 2024, studying Software at Aalborg University. I was responsible for planning, fundraising, and executing the event, where I had to coordinate a handful of tutors to execute the event properly.</p>
Fall 2021	<p>Tutor</p> <p>I volunteered as a tutor for the students in 2021, studying Software at Aalborg University.</p>
2021–2024	<p>UNF Game Development Camp</p> <p>I have been a volunteer at UNF's Game Development Camp, where I have had the following (relevant) roles:</p> <ul style="list-style-type: none"> 2022 Technical Manager In charge of making sure the campers' technical equipment is operational and set up correctly, along with introducing them to <code>git</code>, and managing the problems they might have with the technicalities. 2021 Programmings Assistant Assisting the programming teacher, and helping the campers with any programming related issues they might have.