

Mathias Jakobsen



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EDUCATION

University of Glasgow

2020 - present

Aalborg University

2018 - 2020

Aalborg University

2015 - 2018

Doctor of Philosophy in Computing Science

Studying for a PhD under supervisor Ornela Dardha.

Master of Science in Computer Science

Enrolled into the extra-curriculum **Tech Talent programme**. The thesis was about introducing a behavioural type system with protocols, to an object-oriented language.

Bachelor of Science in Computer Science

Bachelor thesis was about introducing session types to a low-level process calculus called Applied Pi-Calculus. The work was **published at the workshop EXPRESS/SOS 2018** (see publications).

WORK EXPERIENCE

Kodido

2018 - present

Co-Founder and Programmer

Worked with lots of different programming technologies such as Python, Java and Web technologies (Angular 2+ with Typescript). Projects included a **nation-wide marketing campaign** for a large Danish company, that ran for 2 years. Another project was based on optimization algorithms for route planning in a Danish logistics company.

Aalborg University

2019

Teaching Assistant

I was a teaching assistant in the course *Computability and Complexity* taught by Hans Hüttel in the fall semester of 2019. It is a course about the foundations of Computer Science taught to 3rd year students of Computer Science and Software Engineering.

LANGUAGES

Danish

English



OPEN SOURCE PROJECTS

Chrome Extension

2017 - present

SLext

Owner and **main contributor** to an open source browser extension with 350 active users, for enhancing the functionality of the online LaTeX editor Overleaf. It has been acknowledged by the company behind the LaTeX editor.

VOLUNTARY WORK

F-Klubben

2017 - 2020

Member of FIT

F-Klubben is a voluntary organisation of the students at the House of Computer Science at Aalborg University. FIT manages the POS system, mailing lists and other IT services for F-Klubben.

Nordjyllands Inline Motionister

2018 - 2020

Board Member and Trainer

Board Member with responsibilities of managing the technical infrastructure of the club, as well as being a trainer for the other members.

TOOLS AND TECHNOLOGIES

Programming Paradigms

Imperative Programming

Much experience with object-oriented programming in **Java** and **C#**. Many years of experience with **Python**.

Declarative Programming

I have a lot of experience with **SQL (MySQL)**, and also some experience with the functional languages **Haskell** and **Scheme** (Lisp).

Web Technologies

LAMP Stack

I am very experienced with the LAMP (**Linux, Apache, MySQL, PHP**) stack for web development. For the frontend I have years of experience with **HTML/CSS/Javascript** and **Typescript**.

PUBLICATIONS

EXPRESS/SOS 2018

[C1]

2018

Context-Free Session Types for Applied Pi-Calculus

Jens Aagaard, Hans Hüttel, Mathias Jakobsen and Mikkel Kettunen. Published in Proceedings Combined 25th International Workshop on Expressiveness in Concurrency and 15th Workshop on Structural Operational Semantics, Beijing, China, September 3, 2018. <http://dx.doi.org/10.4204/EPTCS.276.3>

APLAS 2020

[C2]

2020

Behavioural Types for Memory and Method Safety in a Core Object-Oriented Language

Mario Bravetti, Adrian Francalanza, Iaroslav Golovanov, Hans Hüttel, Mathias Steen Jakobsen, Mikkel Klinke Kettunen, Antonio Ravara.