Jonas Kastberg Hinrichsen
Curriculum Vitae

Personal Information

DATE OF BIRTH:	09 07 1992
ADDRESS:	Vesterfælledvej 1B, 5. - 4, 1750 København V, Denmark
PHONE:	+45 60 24 99 24
EMAIL:	jihgfee@gmail.com | jkas@itu.dk

Work Experience

AUGUST 2019 - DECEMBER 2019	**Formal Methods Developer at BEDROCK SYSTEMS, INC.** At Bedrock Systems I interned during my ph.d., as a part of the formal methods group, headed by Gregory Malecha, who are developing a mechanised formal foundation for a micro-hypervisor. The job consisted of updating their logic to use the Iris logical framework, discussing and planning the verification approach, as well as verifying a concurrent queue.
APRIL 2016 - AUGUST 2017	**Software Developer at EDLUND A/S** At Edlund I worked part-time as a member of a small software development team, Actulus, which deliver a packaged software, for the calculation of pension schemes and insurances. The job entailed maintenance and feature development of the platform, with a large variety of tasks, such as web development, back-end and quality assurance.
SEPTEMBER 2014 - APRIL 2016	**IT-Employee at the IT UNIVERSITY** Under the supervision of professor Peter Sestoft, I worked part-time on a collaborative project between Actulus A/S and the IT University, which investigated efficient parallel programming on general purpose GPUs for the calculation of life insurance policies. The job included complex optimizations of general purpose GPUs, feature development using a framework Alea.cuBase for the .NET platform, and learning the intricacies of life insurance calculations.
SPRING 2016	**Teaching Assistant for INTELLIGENT SYSTEMS PROGRAMMING** As a teaching assistant, I assisted the course manager, Rune Møller Jensen, with grading weekly assignments and projects, as well as ensuring the learning outcomes of lectures, during exercise hours after each lecture.
AUTUMN 2015	**Teaching Assistant for OPERATIVE SYSTEMS AND C** As a teaching assistant, I assisted the course manager, Kasper Støy, with grading assignments and projects, as well as being on premises during exercise hours, after every lecture.
AUGUST 2011 - MARCH 2013	**Game Developer at ROBOCAT** At Robocat I worked full-time with designing and developing mobile games for the iOS platform, using the game development framework Unity. During the employment I was a part of the development team of two mobile games, Treasure Trouble, as game designer and developer, and 101 Airborne as Lead Developer.

Publications and Drafts

Actris: Session-Type Based reasoning in Separation Logic, POPL 2020
Machine-Checked Semantic Session Typing, CPP 2021 [Distinguished Paper Award]
Actris 2.0: Asynchronous Session-Type Based reasoning in Separation Logic, LMCS (Draft)

Education

2021 (31. March)	PhD, Formal Program Verification **IT University**, Copenhagen
2017	MSc, Software Development **IT University**, Copenhagen
2015	BSc, Software Development **IT University**, Copenhagen

Academic Activities

Artifact Evaluation Committee, ICFP 2020

Volunteer Work

August 2010 - July 2013	Programming responsible at Game Development Camp 2013
	Game Development Camp is a yearly summer camp which introduces a group of teenagers to the art of game development. Under these years camps, I was responsible for planning and teaching programming lectures, as well as being an organizer with responsibility for the participants and the camp
August 2010 - Dec 2011	Member of Steering Committee at UNF København
	UNF København is an organization, that seeks to spread the interest for natural sciences in Copenhagen. As a member of the steering committee, I planned various organizational events and presentations. This entailed contacting professors and lecturers, as well as booking meeting locations. In the latter part of my participation I was elected co-director of the committee, with increased responsibilities.

Languages

Fluent: Danish, English

Software Development Skills

Programming Languages: C#, Coq, F#, Java, Python, Haskell, C, C++, SQL
Operating Systems: Windows, MacOS, Linux
Version Control: Git, Mercurial
Other: LaTeX, Emacs

References

Name	Position
Gregory Malecha	Head of Formal methods group, Bedrock Systems, Inc.
Peter Sestoft	Head of Department, IT University of Copenhagen
Jesper Bengtson	Associate Professor, IT University of Copenhagen