

Egor Namakonov

PhD student working on formal verification of concurrent programs

e.namakonov@cs.au.dk, <https://fresheed.github.io>

Aarhus, Denmark

Professional interests

Formal verification, Concurrency, Weak memory, Liveness

Publications

*October 2026: **Lawyer: Modular Obligations-Based Liveness Reasoning in Higher-Order Impredicative Concurrent Separation Logic***

*February 2026: **Verifying wait-freedom of higher-order programs [preprint]***

*October 2021: **Making weak memory models fair***

*December 2019: **Compilation of OCaml memory model into Power***

Education

*September 2022 – present: **PhD in Computer Science**, Aarhus University*

*September 2018 – July 2020: **Master in Computer Science**, St Petersburg University*

*September 2013 – July 2017: **Bachelor in Software Engineering**, Peter the Great St. Petersburg Polytechnic University*

Industry experience

*July 2019 – August 2022: **JetBrains Research** (St. Petersburg, Russia) – Intern and junior researcher
Weak memory research, teaching*

*November 2015 – July 2018: **OpenWay Group** (St. Petersburg, Russia) – Intern and DevOps engineer
Continuous Integration, internal Python development, VM administration*

Volunteering

*June 2022 – November 2022: **Helping to Leave** (Remote) – Software engineer
DSL-based chatbots development, JavaScript programming*

*June 2022 – May 2024: **OVD-Info** (Remote) – Software engineer
Python chatbots development, CI*

Skills

Programming languages: OCaml, Python, Rust, also: Haskell, C, Java, Kotlin, Elisp, Groovy...

Formal verification tools: Rocq proof assistant, Iris separation logic

Automation tools: Vagrant, Docker, Travis CI, Jenkins

Theory: Formal logic, Dependent types

Languages

Russian – Native speaker, English – Fluent, Danish – Intermediate, German – Beginner