

Jachym Putta

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Upcoming PhD candidate in Computer Science at Yale University with a strong background in machine learning, systems research, and app development. Skilled in concurrent and distributed programming, operating systems design, and performance optimizations.

EDUCATION

YALE UNIVERSITY, New Haven (CT) | Start: Fall 2023
Doctor of Philosophy (PhD) in Computer Science

YALE-NUS COLLEGE, Singapore | AUG 2018 - DEC 2022
Bachelor of Science (Honors)

Major: Computer Science

Major CAP: 4.72 / 5

UNIVERSITY OF OXFORD, Oxford | OCT 2022 - DEC 2022
Visiting Associate Student, Oriel College

Major: Mathematics and Computer Science

SKILLS

Programming Languages: C/C++, Kotlin, Python, Lua

Technical Skills: Concurrent and Distributed Programming, Operating Systems Design, Profiling, Testing, Performance Optimizations

Languages: Czech (Native), English (Fluent), French (Fluent)

RELEVANT EXPERIENCE

RESEARCH ASSISTANT | JAN 2023 – CURRENT

Yale-NUS College, Singapore

- Designed and evaluated different **machine learning models** for finding liveness in cyclic SDF graphs
- Created a **dataset generator** for SDF graphs
- Wrote a **Test suite** for Kiter increasing code coverage by **20%**

RESEARCH ASSISTANT | MAY 2022 – JAN 2023

Yale University, Department of Computer Science, New Haven (CT)

- Profiling and evaluation** of the programmable network switch code, identifying performance bottlenecks
- Implemented **batched operations** into the existing codebase, resulting in up to **12x speedups**
- Transformed and optimized the existing **cache management** algorithm
- Introduced an internal **test suite** and **documentation**

RESEARCH INTERN | DEC 2021 – MAR 2022

Zilliqa, Singapore

- Assist in the development of Scilla-chick, tool used for **property-based testing** of the Scilla **compiler** based on Quick-Chick
- Extend the Scilla syntax used for program generation
- Debugging of the Scilla ecosystem

SOFTWARE ENGINEERING INTERN | APR 2021 – AUG 2021

Upskills, Singapore

- Dockerized** and deployed on **Azure** a licensing server built from scratch as part of a team of three interns which now handles the licenses for all products
- Built back-end infrastructure for webapps in **Python** including networking, user management and the deployment on an **Ubuntu** cloud instance, using **Flask** which were used in demos for clients
- Performed unit and API testing and verification of frontend applications utilizing **Typescript** and **Postman**

Independent projects

- Created a time management app called Chorey in **Kotlin**
- Build a Conway's game of life simulation in **OCaml**
- Implemented a traveling salesman algorithm based on the Google Maps API in **Python**