Ondřej Kubánek

Education

2023-now Master, Chalmers University of Technology, Computer science – algorithms, languages and logic

2020–2023 Bachelor, Charles University, Prague, Theoretical Computer Science

Relevant Formal Mathematics and Proof Assistants, Graph Algorithms,

Courses Advanced C++, Haskell, Compiler Optimizations, Intro to Category theory, Domain theory

Grades Weighted grade average: 1.15, (3.85 GPA)

Bachelor thesis

title Improving GCC loop optimisation with histogram profiling, Grade A

description Adding new histogram counter to Gcov and improving loop optimisations

e.g. peeling and vectorization by having more precise information about loop iterations

supervisors doc. Mgr. Jan Hubička, Ph.D.

result SPEC CPU 2017 integer benchmarks improved by 1% (yearly rate of progress 2.5%)

Experience

2023-now Summer of Nix

Packaging NGI software in the Algae mob

2022 Google Summer of Code

Implemented an algorithm for sorting relevant Haskell packages

to help users pick the correct package and integrated the algorithm into Hackage

Organisation Haskell.org

Project Hackage (Haskell package archive)

Presented results in an open section at Haskell Symposium 2022 (co-located with ICFP 2022)

Link

Coding examples

Haskell Haskell course

C++ G-machine

Programming Languages

Solid Haskell, C, C++

Intermediate C#, Python, Lean, Agda, Nix

Basics SQL, Prolog

Technologies

Docker, systemd, Bash, NixOS, LATEX, git

Languages

English C1 - CAE