

Josh Acay

www.coskuacay.com
cacay@cmu.edu | 412-580-7442

EDUCATION

CARNEGIE MELLON UNIVERSITY | BS IN COMPUTER SCIENCE

Graduated May 2016 | Pittsburgh, PA

- GPA: 4.00/4.00
- Carnegie Mellon University Honors
- School of Computer Science College Honors

EXPERIENCE

WHATSAPP | SOFTWARE ENGINEER

July 2016 – Present | Mountain View, CA

- Worked on server team for client-side metrics storage
- Designed an online audit tool in Elm

PDT PARTNERS | SUMMER TECHNOLOGY ANALYST

June 2015 – August 2015 | New York, NY

- Built a real-time monitoring system to gather latency statistics using C++
- Used Carbon for metric and Cassandra for associated data storage
- Designed dashboards using Python Flask and Graphite/Grafana
- Application will be deployed and used in production for system analysis

UNION PACIFIC RAILROAD | SOFTWARE ENGINEERING INTERN

June 2014 – July 2014 | Omaha, NE

- Setup JIRA project management system for Streamline IT department
- Implemented responsive dashboards using AngularJS, NodeJS, and NVD3
- Integrated data from Postgres database and JIRA RESTful API service
- Application now being used by IT department and operations

PROJECTS

SENIOR HONORS THESIS | UNDERGRADUATE RESEARCH

Spring 2015 – Spring 2016 | Pittsburgh, PA

- Theory of intersection and union types for session-typed concurrency
- Presented in ITRS 2016, to be published in post-proceedings through EPTCS

CUDAPY | PARALLEL COMPUTER PROGRAMMING

Spring 2015 | CMU

- Added GPU programming to Python through NVIDIA's CUDA API
- Implemented a runtime library using Python, Haskell, and CUDA C
- Ranked 4th among 70 projects by judges from Intel and NVIDIA

C0 COMPILER | COMPILER DESIGN

Fall 2014 | CMU

- Implemented an optimizing compiler for a subset of C in Haskell
- Ranked 2nd best in code optimization among 40 teams
- Extended the language and the compiler with first-class functions

LINKS

Github:// [cacay](#)

LinkedIn:// [cacay](#)

SKILLS

PROGRAMMING

Haskell • Standard ML • Python • C/C++ • Erlang • \LaTeX

WEB DESIGN

Elm • AngularJS • Flask

LANGUAGES

Turkish • English • Japanese (elementary)

TEACHING ASSISTANCE

CARNEGIE MELLON UNIV.

15-418: Parallel Prog. (Spring 2016)

15-314: PL Semantics (Spring 2015)

15-210: Data Structures (Fall 2014)

15-150: Functional Prog. (Spring 2014)

15-150: Functional Prog. (Fall 2013)

15-122: Imperative Prog. (Summer 2013)

COURSEWORK

15-411: Compiler Design

15-417: Higher-order Typed Compilation

15-418: Parallel Architecture & Prog.

15-312: Foundations of Prog. Languages

15-812: Prog. Language Semantics

15-317: Constructive Logic

15-451: Algorithm Design & Analysis

15-210: Data Structures and Algorithms

15-381: Artificial Intelligence

15-213: Intro to Computer Systems

15-251: Great Theoretical Ideas in CS

**Current*

HONORS

DEAN'S LIST

All Semesters | Carnegie Mellon Univ.