EMERSON FORD

emersontford@gmail.com 801–203–0542 emersonford emerson-ford

Fourth-year CS student at the University of Utah interested in infrastructure and low-level systems.

EDUCATION

University of Utah

Double BS in Honors Computer Science & Mathematics, Statistics Emphasis

May 2016 – December 2020 | GPA: 3.7 / 4.0

Relevant Course Work: Adv Operating Systems*, Programming Languages*, Operating Systems, Computer Networks, Algorithms, Models of Computation, Intro to Data Science, Intro to Probability* (*currently enrolled)

Skills: Python 3, C, C++, MySQL, LaTeX, Ruby, Rust, Java, Bash, Git, Mercurial, Docker, Docker Compose, AWS S3 & Lightsail, Node.js, Thrift, RPC, asynchronous/event-driven programming, stateless services, networking

EXPERIENCE

University of Utah – Center for High Performance Computing

Student Intern | Salt Lake City | May 2017 – Present

- Prototyped OpenStack, Emulab, and OpenNebula for the development of a HPCaaS environment.
- Implementing Puppet and Foreman for new host provisioning on the SLATE research project.

Facebook

Production Engineer Intern | Seattle | Summer 2019

- Worked with the Storage Platform team which manages all storage hardware at Facebook.
- Developed and deployed a service in Python 3 to automate stress testing of storage nodes.
- Helped and mentored other interns in learning Facebook's tools and infrastructure.

Facebook

Production Engineer Intern | Seattle | Summer 2018

- Developed and deployed an asynchronous, stateless service in Python 3 to manage the lifecycles for all hosts powering Facebook's Scuba service.

LEADERSHIP

HackTheU | Chief Director | May 2017 – Present

Organize and manage a team of 20 that hosts Utah's largest hackathon with over 250 attendees in 2018 at the University of Utah. Administrate the non-profit and 501(c)(3) status of the organization.

School of Computing Undergraduate Advisory Committee | Member | May 2017 – Present

Host student events and serve as the student voice for the School of Computing.

PROJECTS / ACTIVITIES

- Deployed registration.hacktheu.org and auth.hacktheu.org on AWS with Docker/Docker Compose.
- Linux character device kernel modules and a custom sbrk implementation in xv6 for Operating Systems.
- Basic reliable transport protocol, load balancer, and malware filtering proxy for Computer Networks.
- Second place winner of the Lucid Software Capture the Flag competition.