

Matthew Zhu

mattz496@gmail.com • (954) 536-6573 • US Citizen
matthewzhu.com • github.com/mz496 • linkedin.com/in/mz496

EDUCATION **Carnegie Mellon University**, Pittsburgh, PA Expected May 2018
B.S. in Computer Science, Minor in Mathematics

- Cumulative GPA: 3.90 / 4.00
- Selected courses: machine learning, distributed systems, artificial intelligence, numerical methods, technical communications

EXPERIENCE **Amazon Lab126**, Sunnyvale, CA Jun 2017 – Aug 2017
SDE Intern, Alexa Engine

- Enabling sending cloud-initiated directives to tablets using MQTT over AWS IoT instead of opening voice channels over HTTP, which is prohibitively unscalable
- Reorganizing Alexa connection services to allow easier integration of new devices

Carnegie Mellon University, Pittsburgh, PA Aug 2016 – Dec 2016
Teaching Assistant for 15-122 Principles of Imperative Computation

- Managed introductory CS course of 400+ students with a team of 32 other TAs
- Led 3 weekly labs of ~20 students to help guide students through coding exercises
- Held weekly office hours to answer questions about concepts and homework

Intentional Software, Seattle, WA Jun 2016 – Aug 2016
Intern Software Analyst and Developer

- Created GPU performance profiling layer in C# and C++ CLI for an early version of the Whiteboards app for the Microsoft Surface Hub

Motorola Solutions, Plantation, FL Jun 2015 – Aug 2015
Embedded Software Engineer

- Built 2 Perl tools for end-to-end testing that two-way wireless radios correctly remotely receive and decode firmware updates

SKILLS Languages: Python, Java, C, JavaScript, HTML5, CSS3, SML, Perl, Intel Assembly
For fun: Linux Mint for my laptop, Git for my homework, Audacity for mashups

PROJECTS **Scalable Store Service**, 15-440 Distributed Systems

- Elastic load-balancing system in Java to handle simulated request patterns for an online store while maximizing throughput and minimizing resource usage

MAΘ Timers

- Web app that simplifies timing logistics, previously managed by proctors manually, for the MAΘ national math honor society. Officially used since 2014

Ten-Second Planetarium

- Web visualization of the solar system that approximates physical laws of planetary motion, with speed scaled such that an Earth year lasts ten seconds

Subvert: Resistance Universe Toolkit

- Android app to aid portable gameplay of the board game Avalon/The Resistance

HONORS School of Computer Science Dean's List Spring 2016 – Spring 2017
Mellon College of Science Dean's List with High Honors Fall 2014 – Fall 2015
Emerson National Merit Scholarship 2014 – 2018