Matthew Zhu

10164 NW 3rd Place, Coral Springs, FL 33071 mzhu1@andrew.cmu.edu • (954) 536-6573 matthewzhu.com • github.com/mz496 • linkedin.com/in/mz496

EDUCATION Carnegie Mellon University, Pittsburgh, PA

B.S. in Computer Science, Minor in Mathematics

Expected May 2018

- Cumulative GPA: 3.90 / 4.00
- Completed coursework: imperative and functional programming, discrete math, computer systems, parallel and sequential data structures and algorithms, distributed systems
- Coursework in progress: machine learning

SKILLS Proficient: Python, C, JavaScript, HTML5, CSS3, SML

Familiar: Java + Android, Intel x86-64 Assembly, Perl, Ruby on Rails, Angular, React

Carnegie Mellon University, Pittsburgh, PA

Aug 2016 – present

EXPERIENCE Teaching Assistant for 15-122

- Managed introductory CS course of 475 students with a team of 32 other TAs
- Led 3 weekly lab sessions of about 20 students each and held office hours to answer questions about concepts and homework

Intentional Software, Seattle, WA

Jun 2016 – Aug 2016

Intern Software Analyst and Developer

- Created a C#/C++ CLI interop layer to profile GPU performance for a flagship office productivity app designed for large touchscreens
- Implemented precise GPU method timing using DirectX 11 queries in aforementioned profiling layer to help discover performance bottlenecks in the app's release candidate

Motorola Solutions, Plantation, FL

Jun 2015 – Aug 2015

Embedded Software Engineer

- Developed 2 Perl tools to automate verification of correctly downloading wireless firmware updates for two-way radios
- · Reconstructed binary files from chunks, sent them wirelessly to the radio, and verified that the received data in the radios' output logs matched the sent data

PROJECTS MAO Timers

- Web app that accurately simulates proctors in competition testing environment for 8 test types administered by Mu Alpha Theta math honor society
- In official use since the 2014 National Convention

Ten-Second Planetarium

- HTML5 canvas visualization using math and astronomical data that depicts the passage of time using the benchmark that ten seconds represents one year
- Approximates Kepler's three laws of planetary motion

Subvert: Resistance Universe Toolkit

 Android app that implements all the gameplay of the party board games The Resistance and The Resistance: Avalon, so they can be easily played without a game board or game pieces

HONORS

School of Computer Science Dean's List For attaining a semester GPA of 3.75 or higher

Spring 2016

Mellon College of Science Dean's List with High Honors For attaining a semester GPA of 3.75 or higher

Fall 2014 - Fall 2015

Ranked in top 25% in Putnam Mathematical Competition 15 / 120 points; over 4000 participants nationwide

2014