# Matt Wang

5106 Frist Center, Princeton University, Princeton, NJ 08544 mattwang1997@gmail.com www.linkedin.com/in/mattwang1997

408-207-7869 github.com/mattkwang www.mattkwang.me

**OBJECTIVE:** Seeking a technical internship to gain experience and expand my skillset.

### **EDUCATION**

Princeton University

People of Spinger in Engineering Electrical Engineering (ELE

Princeton, NJ Expected May 2019

Bachelor of Science in Engineering, Electrical Engineering (ELE)

Cumulative GPA: 3.92

#### Relevant Coursework

Completed Courses

ELE 206/COS 306 – Contemporary Logic Design

ELE 201 – Information Signals

COS 126 – General Computer Science

ELE 208B – Electronic and Photonic Devices

ELE 301 - Designing Real Systems

COS 226 – Algorithms and Data Structures

#### **Current Courses**

ELE 203 – Electronic Circuit Design ELE 464 – Embedded Computing

COS 217 – Introduction to Programming Systems

COS 340 – Reasoning About Computation

#### **SKILLS**

Software Applications/Languages: Proficient in Java, MATLAB, Android Development, Verilog HDL.

Familiar with Python, C, HTML, CSS, JavaScript, Arduino, 3D Mechanical CAD (Autodesk Inventor).

Hardware: Familiar with oscilloscopes, function generators, soldering, digital logic circuits, semiconductor devices.

**Biological Research Techniques:** Familiar with cell plating, PCR, gel electrophoresis, soil treatment, statistical analyses.

Languages: Proficient in English, Mandarin Chinese, and Spanish.

### WORK EXPERIENCE AND PROJECTS

# M2Robots (Startup), Intern - MATLAB, Autodesk Recap360

(Summer 2016)

• Used MATLAB to analyze model data from .obj files created by Recap360 for mathematical calculations.

• Created GUI for user to input coordinates of model boundaries, able to create a new .obj file with the user-defined bounds.

### **Undergraduate Computer Science Grader**

(Fall 2016 – present)

• Grade and provide helpful comments on code written by current COS 126 students in each semester.

### Decide4U - HackPrinceton Fall 2016, Built for Android

(Fall 2016)

- Social app, where users ask for help with decisions with two choices, and other users can choose their preferred option.
- Designed/developed front-end UI structured layouts, implemented a swipe view, set page navigation and refreshing.

### BeagleBone App - ELE 301, Built for Android

(Fall 2016)

- Takes data from tablet's built-in sensors and external digital thermometer, connected to a BeagleBone with an I<sup>2</sup>C bus.
- Uses thermometer value to vary the speed of a fan, using the tablet audio jack to send a sine signal for open-loop control.

# Arduino-Based Bots - Personal Project, Built on Arduino

(Summer 2016)

Collaborated to build two remote-controlled robots with driving, distance-sensing, GPS-location-detecting functionalities.

# WordNet - COS 226, Built with Java

(Fall 2016

• Describes a semantic lexicon, using BFS on a rooted DAG to calculate distance between or nearest ancestor of two nouns.

#### Princeton University Computer (PUnC) - ELE 206/COS 306, Built with Verilog HDL

(Fall 2015)

• Designed/built 16-bit processor with behavioral Verilog, synthesize on an FPGA. Implemented LC-3 instruction set.

### **MISCELLANEOUS WORK**

### The Ivy Advisor, Office Assistant and Tutor

(Summer 2015)

- Tutored two international Chinese students in Algebra 2, English Grammar.
- Reorganized/rewrote website text for new website (current), conducted basic clerical work and tech support.

# ShareWorld Learning Center, SAT Tutor

(Summer 2015)

Tutored single student intensively across subjects in SAT exam, leading to a 250-point increase in tested score.

#### Young Scholars Program, Research Intern

(Summer 2014)

• Studied Anaerobic Soil Disinfestation (ASD) as lab intern in USDA-ARS lab, UC Davis.

### **ACTIVITIES**

# Princeton iGEM Team, Website Head

(2016-present)

• Studying advances in biotechnology in preparation for 2016-2017 competition season, designing team/competition website.

### Princeton LGBT Peer Educator, Butler Residential College

(2016-present)

Conduct panels and educational modules about LGBTQIA and intersecting identities during the school year.