Matt Wang

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

EDUCATION

Princeton University *Princeton, NJ*
Bachelor of Science in Engineering, Electrical Engineering (ELE) *Expected May 2019*
Cumulative GPA: 3.94 Major GPA: 4.00

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, HTML, CSS, jQuery, 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)*
- Grade and provide helpful comments on code written by COS 126 students in the Fall 2016 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^2C 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.