GUANQUN WU

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OBJECTIVE

I'm looking to solve interesting and difficult computing problems. I have a background in web development and am currently interested in learning and working in machine learning. I'm also interested in hardware development and have taken a number of Electrical and Computer Engineering classes.

EDUCATION

Cornell University, College of Engineering, Ithaca, NY   **Expected May 2020**
Bachelor of Science, Computer Science
Minor(s): Electrical and Computer Engineering
GPA: 4.20 (Overall up till Spring 2019)

Raffles Institution, Singapore   **Dec 2015**
Awards: Lee Kuan Yew Award for Maths and Sciences 2014, National Olympiad of Informatics Gold 2014, Singapore Chemistry Olympiad Gold 2015

Relevant Courses: CS 2112 Honors OOP and Data Structures, CS 3110 Functional Programming, CS 4820 Algorithms, CS 4786 Machine Learning for Data Science, ECE 3140 Embedded Systems

RELEVANT EXPERIENCE or ENGINEERING EXPERIENCE

Receiptastic Pte Ltd, Singapore, Director/Software Engineer   **Jun-Aug 2018**
- Ran my own company to make an online ordering and accounting system
- Built a system by myself that comes with a website and phone apps (in Android and iOS). The website was built on a React frontend and an Elixir backend
- Sold a copy of the system. It is currently (as of Aug 2019) deployed and in use by a Singapore company. It has significantly improved their productivity and allowed them to take on a lot more orders at a time

Raffles Institution, Singapore, Student   **Mar-Apr 2014**
- Built a website for RI-Maurick Water Conference.
- Allowed attendies to submit PDFs of their research reports and provided relevant information for the event

TEACHING EXPERIENCE

CS 3110, Functional Programming   **Aug-Dec 2019**
- Consultant, in charge of holding office hours and grading

RELEVANT ACHIEVEMENTS

Google Codejam 2019   **Apr-May 2019**
- Algorithm Programming Competition (Solve some algorithm problems in 3 hours)
- Qualified for Round 2. Rank 2220

Google Hashcode 2019   **Feb 2019**
- Team based competition to score points solving an open ended problem in 4 hours
- Team O(1) Haircut. Ranked 587th place (out of ~6000+ teams)

MIT Battlecode 2018   **Jan-Feb 2018**
- AI coding competition. Create a bot to compete in a real time strategy game
- Team Sudoers. Placed 5th-6th place in International Qualifiers. Only 4 teams qualified for finals.

ACADEMIC PROJECTS

Critter World, CS 2112
- Wrote a parser and interpreter for a custom critter language
- Created a GUI to display the critters and their actions

- Wrote a client server interface to allow clients to connect to remote critter world instances

Pong Game, ECE 3140
- Created a Pong game that is displayed on a computer screen and plays using physical joysticks that are connected to a microcontroller which processes the game

LEADERSHIP EXPERIENCE
Singapore Armed Forces, Singapore, *Service Medic (Corporal)*   **Jan 2016-Jan 2018**
- Mandatory Military Service for all Singapore citizens
- Helped run the SAF physiotherapy center at the Military Medicine Institute. Helped teach patients exercises and performed physiotherapy treatments on some patients. Was joint physiotherapy assistant in charge from Apr 2018.
- Wrote some Excel scripts that helped automate center statistics and are still used as of Aug 2019

SPECIALIZED SKILLS
Object Oriented Programming (Python, Java, C++); Functional Programming (OCaml, Elixir)

Application Programming Languages: C, C++, Java, Python (including numpy and pandas), OCaml, Matlab, VBA for Excel, ARM Assembly

Web Programming Languages: HTML, CSS, Javascript (ES6), React (Frontend), Redux, Elixir/Phoenix (Backend) Experience deploying Ubuntu servers on DigitalOcean

Hardware Programming Languages: Verilog

Instrument Usage: DMM, SMU, Oscilloscope, Waveform Generator, DC Power Supply

Programs: Microsoft Office (Word, Powerpoint, Excel), Text Editors (Notepad++, Sublime Text), Command Line

Operating Systems: Windows 10, Mac OSX, Linux (Ubuntu)

Foreign Languages: Chinese (fluent)