

SAMUEL HWANG

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TECHNICAL STRENGTHS

Languages: C, C++, C#, Python, MATLAB, HTML/CSS, Assembly
Software & Tools: Git, Vim, Visual Studio, Xamarin Studio, MySQL, Atmel Studio, Photoshop CC, L^AT_EX

WORK EXPERIENCE

UCR Department of Sociology

Software Developer

2017

Riverside, CA

- Developing software in C++ with the Z-Tree platform to conduct behavioral experiments for UCR's Sociology Department
- Constructing a user-friendly interface to make experiments smooth and simple for all participants
- Coordinating with my team to study economic scenarios and create software to cater to these ideas

MA Labs

Product Distributor

2014

City of Industry, CA

- Assisted a distribution company to handle the processing and packaging of computer hardware
- Organized hardware products to ship and invoices for coworkers depending on item, quantity, and priority

PROJECTS

J.Crew Factory Sales Browser

<https://github.com/samhwangg/J.Crew-Factory-Sales-Browser>

Data Management

- Developed a program in Python that web-scrapes information about products on the J.Crew Factory website such as the name, original price, and sales price and inserts them into a table in MySQL
- The program also plots this information on Plot.ly using their API showing the user what items have the best deals

Unix Shell

<https://github.com/samhwangg/rshell>

Software Construction

- Imitated a custom Bash terminal with C++ to navigate through files and directories with the same commands such as ls, cd, etc
- Terminal could also handle more complex commands with parenthesis and boolean clauses in addition to rejecting incorrect inputs

8-Puzzle Solver

<https://github.com/samhwangg/8-Puzzle-Solver>

Artificial Intelligence

- Implemented A* Search in C++ to find the solution to an unsolved 8-puzzle inputted by the user.
- Compares the run-time of different heuristics used such as Uniform Cost heuristic and Manhattan Distance heuristic.

LCD Racer Game

<https://github.com/samhwangg/LCD-Racer>

Embedded Systems

- Programmed an ATMEGA1284 with an LCD screen, buttons, and LED lights to simulate a racing video game for two players.
- Player 1 avoids objects that scroll through the screen and Player 2 shoots projectiles to try and hit Player 1.

EXTRA-CURRICULAR

Theta Tau, Co-Ed Professional Engineering Fraternity

2015-Present

Corresponding Secretary (2016-2017) | Webmaster (2017-Present)

Riverside, CA

- Assisted Executive Board to maintain chapter relations with alumni and surrounding Theta Tau chapters
- Head coordinator of the Western Regional Conference hosted at UCR on October 2016
- Managed a committee of 15 people to plan an all-day event with a budget of over \$10,000
- Maintaining our chapter's website as Webmaster: <http://www.thetatauucr.com>

Eagle Scout

2006 - 2014

Troop 730

Diamond Bar, CA

- Developed leadership skills as a Boy Scout for eight years and earned the rank of Eagle Scout

EDUCATION

University of California, Riverside

B.S. in Computer Science

Expected Graduation: June 2018

- Received Highlander's Excellence Scholarship to UCR