Brandon Wang

Computer Science Student

Personal Information

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LinkedIn
linkedin.com/in/brandonw4

Github
github.com/coconut750750

Website
coconut750750.github.io

Programming Languages (Proficient)

Python
Java
C++
JavaScript | HTML | CSS

Programming Languages (Familiar)

C#
SQL
Swift

Technologies

Git
AWS
Docker
Bamboo | Travis
Flask
JQuery | AngularJS | ReactJS
Android | Unity

Technical Skills

Computer Programming
Data Structures
Computer Architecture

Curious, persistent, and ambitious computer science student skilled at leadership and teamwork. Seeking for opportunities to expand computer science knowledge and pursue interdisciplinary projects.

Education

08/2017 - 05/2020 — University of Illinois at Urbana-Champaign

B.S. in Computer Science — GPA: 4.0 / 4.0

- Dean's List | James Scholar | Campus Honors
- Coursework: Data Structures, Computer Architecture, System Programming, Artificial Intelligence
- Recipient of the 2018-2019 Illinois Engineering Achievement Scholarship

Experience

03/2018 - 08/2018 — Chicago Mercantile Exchange Group

Software Engineer

- Modeled crop yield data with linear regression and neural network models to give insight about the structure of commodities market
- Engineered a versatile and modular metric analytics reporting application
- Programmatically examined financial exchange data to pinpoint inaccuracies
- Optimized collaboration and project turnaround by adopting agile programming and test-driven development techniques as well as utilizing continuous integration

06/2016 - 08/2016 — Secondary Student Training Program

Computer Science Researcher

- Analyzed three-years of data on more than 100,000 IoT devices to characterize trends in patching behavior
- Correlated data with known patch releases and visualized trends
- Constructed mathematical models to predict future behaviors

08/2014 - 03/2016 — Shanghai Technology Institute

Research Intern

- Developed a web-store crawler to augment mobile security research
- Engineered a system of detecting insecure mobile applications

Publications

06/2017 — *Measurement and Analysis of Patching Practices for Industrial Control Systems*
https://dl.acm.org/citation.cfm?id=3084455

Projects

2018 - present — Shapify — https://github.com/coconut750750/shapify

- Designed a genetic algorithm to recreate an image using translucent polygons
- Optimized algorithmic performance with polygon vectorization

2018 - present — Waffle — https://github.com/coconut750750/waffle

- Created a React application that helps indecisive users pick where to eat by applying the Elo Ranking System to select the winning restaurant
- Implemented an Express server to support cross origin resource sharing

2018 - present — Heist — https://github.com/coconut750750/Heist

- Created a 2D Unity adventure game programmed with a custom navigation system that converts cartesian space into graphs and implements an A* path-finding algorithm

Activities

2018 — Engineering Open House Corporate Director
Software Design Studio Code Review Moderator
SIG Human Computer Interaction Chair

2017 — Reflections | Projects Public Communications
CS SAIL Teacher