ALVIN ROBERT BIERLEY

bierleya@carleton.edu • (408) 337-8924 • github.com/bierleya • linkedin.com/in/alvin-bierley

EDUCATION

Carleton College | Northfield, MN   June 2021
Bachelor of Arts in Computer Science   Cumulative GPA: **3.45**
                                                                              Computer Science GPA: **3.7**

SUMMARY

Multi-faceted software engineer with a strong understanding of object-oriented programming, data structures, and algorithm implementation. Valuable team player with a personable and dedicated nature.

SKILLS

Languages: Python, Java, C, JavaScript, PHP, R, MATLAB, HTML, CSS
Other Technologies: Postgres, NoSQL, React, Flask, Git
Communication: Mandarin (fluent), Spanish (proficient)

PROFESSIONAL EXPERIENCE

Carleton College | Northfield, Minnesota
Backend Web Development Intern   September 2020 – Present
- Developed plugins for WordPress and Omeka sites using PHP, HTML, and CSS
- Extended functionality of existing plugins to increase website customizability and user accessibility

Annapurna Solutions | Houston, Texas
Software Engineer Intern   June 2020 – September 2020
- Wrote Python scripts to utilize geo mapping RESTful APIs for application development
- Leveraged Elasticsearch to query the application database and provide detailed analytics and visualization tools
- Developed an AI model to categorize user-uploaded images and focus on detecting instances of illegal dumping

Qolsys | San Jose, California
Financial Accounting Intern   June 2019 – August 2019
- Created an excel model to estimate future company expenditures based on past reported financial trends
- Streamlined financial reporting by implementing Excel functions to create daily spreadsheets

Bierley Associates Inc. | San Jose, California
Web Development Intern   July 2019 – August 2019
- Maintained and developed company website with HTML, CSS, and JavaScript
- Created HTML email to increase company outreach and brand awareness

PROJECTS (github.com/bierleya)

Settlers of Catan AI | *Senior Project at Carleton College*
- Extended JSettlers (open source Java implementation) by replacing heuristics with an evolutionary algorithm
- Implemented genetic programming to find the most optimal move given a board state

CycleGAN | *Machine Learning Project at Carleton College*
- Developed the generator and discriminator neural networks for a CycleGAN used for image style transfer
- Introduced upsampling to replace transposed convolutional layers in the model to enhance image quality

Scheme Interpreter | *Programming Languages Project at Carleton College*
- Created an interpreter for the Scheme programming language. Written in C, utilizes bottom-up parsing.

UFO Website | *Software Design Project at Carleton College*
- Web application with search functionality that pulls and filters information from a database of UFO sightings

Scale | *Personal Side Project (bierleya.github.io/scale)*
- Interactive conversions site allowing instant conversions between temperatures, binary/decimal/hex, and metric/customary units. Created with React.