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EDUCATION

The Cooper Union for the Advancement of Science and Art, New York, NY 2018 | 2022 BE in Electrical Engineering, Concentration in Computer Engineering, GPA: 4.00/4.00 Relevant Courses: Data Structures & Algorithms, Artificial Intelligence, C, Digital Logic Design

Ramaz Upper School, New York, NY

2013 | 2017

GPA: 3.8/4.0, AP Java: 5, AP Physics: 5, ACT: 36

Gorfinkle/Waldman Award for Outstanding Work in the Study of Computer Science

WORK EXPERIENCE

${\bf Cooper~Union~Summer~STEM~Program},~{\it Teaching~Assistant}$

Summer 2019

New York, NY

- Collaborated with three other teaching assistants to plan a six-week web application development curriculum for twenty-four students.
- Created presentations and taught classes on web application development, including lectures on JavaScript, React, HTML, & CSS.
- Assisted six groups of students on the design and development of their web applications, which supported one of the UN's Sustainable Development Goals.

KeyMe, Front-End Programming Intern

Summer 2017

New York, NY

- Revamped shopping cart navigation by determining underlying bug, investigating alternatives, and implementing solution to increase product stability.
- Created end-to-end easter-egg coupon experience to incentivize purchase.
- Collaborated with the front-end team to become familiar with new codebase and tools.

PROJECT WORK

Checkers AI, Artificial Intelligence, Cooper Union

Fall 2019

- Created a checkers playing AI by implementing a minimax search with alpha-beta pruning and iterative deepening.
- Built a checkers game with an ASCII interface that allows users to start a new game, load a custom board, play the AI, or have the AI play against itself.
- Developed and thoroughly tested a heuristic function for the AI by having the AI play itself with different heuristics.

Guess The Song, Independent

Winter 2019

- Built web version of a song guessing game I play with friends using Node.js, JavaScript, and the Spotify Web API to hone my back-end development skills.
- Code can be viewed at https://github.com/alorber/Guess-The-Song.

Don't Break the Ice, Digital Logic Design, Cooper Union

Fall 2018

- Designed, prototyped, built, and tested puzzle game using integrated circuits and LEDs with Logisim, breadboards, and a perfboard.
- Wrote technical report and presented project detailing end-to-end design process.

Ramaz Artist Project, Independent

Spring 2017

- Built http://artistproject.ramaz.org for an art web series using self-taught JavaScript, HTML, CSS, JQuery, and Bootstrap.
- Collaborated with head of project on design and content of website.

LEADERSHIP EXPERIENCE

Cooper Union Hillel, Event Coordinator

Fall 2018 | Fall 2019

New York, NY

- Manage logistics to ensure that monthly events run smoothly for over thirty students.
- Collaborate with board members to determine roadmap for semester's event programming.

SKILLS

Programming: JavaScript, C++, Java, Node.js, React, C, HTML, CSS, Bootstrap, JQuery, Jekyll

Software: Microsoft Office, AutoCAD, SolidWorks

Languages: Hebrew (Proficient)

Hobbies: Reading, Taekwando, Theater, Board Games, Crossword Puzzles