

# Andrew Lorber

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EDUCATION	<b>The Cooper Union for the Advancement of Science and Art</b> , New York, NY 2018 - 2022 <i>BE in Electrical Engineering, Concentration in Computer Engineering</i> , GPA: 3.93/4.00 Relevant Courses: Data Structures & Algorithms, Artificial Intelligence, C, Digital Logic Design	
	<b>Ramaz Upper School</b> , 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	<b>Cooper Union Summer STEM Program</b> , <i>Teaching Assistant</i> New York, NY	Summer 2019
	<ul style="list-style-type: none"><li>• Collaborated with three other teaching assistants to plan a six-week web application development curriculum for twenty-four students.</li><li>• Created presentations and taught classes on web application development, including lectures on JavaScript, React, HTML, &amp; CSS.</li><li>• Assisted six groups of students on the design and development of their web applications to support one of the UN's Sustainable Development Goals.</li></ul>	
	<b>KeyMe</b> , <i>Front-End Programming Intern</i> New York, NY	Summer 2017
	<ul style="list-style-type: none"><li>• Revamped shopping cart navigation by determining underlying bug, investigating alternatives, and implementing solution to increase product stability.</li><li>• Created end-to-end easter-egg coupon experience to incentivize purchase.</li><li>• Collaborated with the front-end team to become familiar with new codebase and tools.</li></ul>	
PROJECT WORK	<b>Neural Network</b> , <i>Artificial Intelligence, Cooper Union</i>	Fall 2019
	<ul style="list-style-type: none"><li>• Built an artificial neural network with one hidden layer that can be trained and tested.</li><li>• Created a custom data-set that can be used to train and test the neural network.</li></ul>	
	<b>Checkers AI</b> , <i>Artificial Intelligence, Cooper Union</i>	Fall 2019
	<ul style="list-style-type: none"><li>• Created a checkers playing AI by implementing a minimax search with alpha-beta pruning and iterative deepening.</li><li>• 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.</li><li>• Developed and thoroughly tested a heuristic function for the AI by having the AI play itself with different heuristics.</li></ul>	
	<b>Guess The Song</b> , <i>Independent</i>	Winter 2019
	<ul style="list-style-type: none"><li>• 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.</li></ul>	
	<b>Don't Break the Ice</b> , <i>Digital Logic Design, Cooper Union</i>	Fall 2018
	<ul style="list-style-type: none"><li>• Designed, prototyped, built, and tested puzzle game using integrated circuits and LEDs with Logisim, breadboards, and a perfboard.</li><li>• Wrote technical report and presented project detailing end-to-end design process.</li></ul>	
LEADERSHIP EXPERIENCE	<b>Cooper Union Hillel</b> , <i>Vice President</i> , New York, NY	Fall 2019 - Fall 2020
	<ul style="list-style-type: none"><li>• Work with president to lead monthly meetings, finalize event details, and ensure all club programs are properly managed.</li></ul>	
	<b>Cooper Union Hillel</b> , <i>Event Coordinator</i> , New York, NY	Fall 2018 - Fall 2019
	<ul style="list-style-type: none"><li>• Managed logistics to ensure that monthly events ran smoothly for over thirty students.</li><li>• Collaborated with board members to determine road-map for semester's event programming.</li></ul>	
SKILLS	<b>Programming:</b> JavaScript, C++, Java, MATLAB, Node.js, C, HTML, CSS, Bootstrap <b>Software:</b> Microsoft Office, AutoCAD, SolidWorks, Logisim, Multisim <b>Languages:</b> Hebrew (Proficient) <b>Hobbies:</b> Reading, Taekwando, Theater, Board Games, Crossword Puzzles	