

# Andrew Lorber

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| EDUCATION             | <b>The Cooper Union for the Advancement of Science and Art</b> , New York, NY 2018   2022<br><i>BE in Electrical Engineering, Concentration in Computer Engineering</i> , GPA: 4.00/4.00<br>Relevant Courses: Data Structures & Algorithms, Artificial Intelligence, C, Digital Logic Design   |                       |
|                       | <b>Ramaz Upper School</b> , New York, NY 2013   2017<br>GPA: 3.8/4.0, AP Java: 5, AP Physics: 5, ACT: 36<br>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><br>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 which will support one of the UN's Sustainable Development Goals.</li></ul> |                       |
|                       | <b>KeyMe</b> , <i>Front-End Programming Intern</i><br>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>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><li>• Code can be viewed at <a href="https://github.com/alorber/Guess-The-Song">https://github.com/alorber/Guess-The-Song</a>.</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>   |                       |
|                       | <b>Ramaz Artist Project</b> , <i>Independent</i>   | Spring 2017           |
|                       | <ul style="list-style-type: none"><li>• Built <a href="http://artistproject.ramaz.org">http://artistproject.ramaz.org</a> for an art web series using self-taught JavaScript, HTML, CSS, JQuery, and Bootstrap.</li><li>• Collaborated with head of project on design and content of website.</li></ul>  |                       |
| LEADERSHIP EXPERIENCE | <b>Cooper Union Hillel</b> , <i>Event Coordinator</i><br>New York, NY  | Fall 2018   Fall 2019 |
|                       | <ul style="list-style-type: none"><li>• Manage logistics to ensure that monthly events run smoothly for over thirty students.</li><li>• Collaborate with board members to determine roadmap for semester's event programming.</li></ul>  |                       |
| SKILLS                | <b>Programming:</b> JavaScript, C++, Java, Node.js, React, C, HTML, CSS, Bootstrap, JQuery, Jekyll<br><b>Software:</b> Microsoft Office, AutoCAD, SolidWorks<br><b>Languages:</b> Hebrew (Proficient)<br><b>Hobbies:</b> Reading, Taekwando, Theater, Board Games, Crossword Puzzles   |                       |