

# 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, GPA: 3.93/4.00</i>	
PROJECT WORK	<b>Machine Learning Projects</b> , <i>Frequentist Machine Learning, Cooper Union</i> Summer 2020 <ul style="list-style-type: none"><li>Completed seven small projects on different machine learning models and topics: Linear Regression, Logistic Regression, Cross-Validation, Gradient Boosted Trees, Random Forest, NFM, &amp; Market Basket Analysis.</li></ul>	
	<b>Neural Network</b> , <i>Artificial Intelligence, Cooper Union</i> Fall 2019 <ul style="list-style-type: none"><li>Built, trained, and tested an artificial neural network with one hidden layer.</li><li>Trained and tested the neural network with a custom data-set.</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>	
WORK EXPERIENCE	<b>Robotics Crash Course</b> , <i>Cooper Union STEM Program, Teaching Assistant</i> Summer 2020 <ul style="list-style-type: none"><li>Planned curriculum with three others for two three-week remote sessions of twenty students.</li><li>Created lectures and taught lessons on Git, GitHub, and various C++ topics.</li><li>Assisted students on the design and development of their car's object avoidance algorithm.</li></ul>	
	<b>CS for Social Good</b> , <i>Cooper Union STEM Program, Teaching Assistant</i> 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> 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>	
LEADERSHIP EXPERIENCE	<b>Cooper Union Hillel</b> , <i>Vice President (Fall 2019 - 20), Event Coordinator (Fall 2018 - 19)</i> <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><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> Python, C++, JavaScript, MATLAB, Node.js, HTML, CSS, Java	
	<b>Software:</b> XCode, PyCharm, Wireshark, MATLAB, Microsoft Office, AutoCAD, Logisim	
	<b>Hobbies:</b> Reading, Theater, Board Games, Crossword Puzzles, Mixology	