

Andrew Lorber

andrewlorber5@gmail.com | 9143306244 | andrewlorber.org

EDUCATION	The Cooper Union for the Advancement of Science and Art , New York, NY 2018 - 2022 <i>BE in Electrical Engineering, Concentration in Computer Engineering, GPA: 3.93/4.00</i>	
WORK EXPERIENCE	Robotics Crash Course , <i>Cooper Union STEM Program, Teaching Assistant</i> Summer 2020 <ul style="list-style-type: none">Planned curriculum, with three others, for two three-week sessions of roughly twenty students.Taught lessons and created presentations on Git, GitHub, and various C++ topics.Assisted students on the design and development of their car's object avoidance algorithm.	
	CS for Social Good , <i>Cooper Union STEM Program, Teaching Assistant</i> Summer 2019 <ul style="list-style-type: none">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 to support one of the UN's Sustainable Development Goals.	
	KeyMe , <i>Front-End Programming Intern</i> Summer 2017 <ul style="list-style-type: none">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	Machine Learning Projects , <i>Frequentist Machine Learning, Cooper Union</i> Summer 2020 <ul style="list-style-type: none">Completed seven small projects, each focusing on a different machine learning model or topic: Linear Regression, Logistic Regression, Cross-Validation, Gradient Boosted Trees, Random Forest, NFM, & Market Basket Analysis.	
	Neural Network , <i>Artificial Intelligence, Cooper Union</i> Fall 2019 <ul style="list-style-type: none">Built an artificial neural network with one hidden layer that can be trained and tested.Created a custom data-set that can be used to train and test the neural network.	
	Checkers AI , <i>Artificial Intelligence, Cooper Union</i> Fall 2019 <ul style="list-style-type: none">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 , <i>Independent</i> Winter 2019 <ul style="list-style-type: none">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.	
	Don't Break the Ice , <i>Digital Logic Design, Cooper Union</i> Fall 2018 <ul style="list-style-type: none">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.	
LEADERSHIP EXPERIENCE	Cooper Union Hillel , <i>Vice President (Fall 2019 - 20), Event Coordinator (Fall 2018 - 19)</i> <ul style="list-style-type: none">Work with president to lead monthly meetings, finalize event details, and ensure all club programs are properly managed.Managed logistics to ensure that monthly events ran smoothly for over thirty students.Collaborated with board members to determine road-map for semester's event programming.	
SKILLS	Programming: Python, C++, JavaScript, MATLAB, Node.js, HTML, CSS, Java	
	Software: XCode, PyCharm, Wireshark, MATLAB, Microsoft Office, AutoCAD, Logisim	
	Hobbies: Reading, Theater, Board Games, Crossword Puzzles, Mixology	