SIMON J. MENDELSOHN
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EDUCATION

Yale University, New Haven, CT, 2016 – 2020
B.S. in Computer Science (with distinction) and Statistics & Data Science
GPA: 3.77
President, Yale Chess Club, 2018 – 19
Vice President, Yale Math Competition (oversees MMATHS as well as Girls in Math at Yale), 2019 – 2020
Instructor, HackYale, 2018 – 2020
Chess Tutor, underserved elementary students in New Haven Public Library, 2017 – 2019

Rae Kushner Yeshiva High School, Livingston, NJ, 2012-16
SAT: 2360 (Math: 800, Verbal: 800, Writing: 760)
SAT II: Math Level 2: 800, US History: 800
APs: BC Calculus: 5, Statistics: 5, Physics I: 5, US History: 5, Psychology: 5, English Lit: 5, English Lang: 5
National Merit Scholarship Winner, 2016
First Place, Math Majors of America Tournament for High Schools (MMATHS), Yale (alt. date), 2016

EXPERIENCE

Software Development Engineer, Amazon, 2020 - Present
- Extracted features from data logs to use for machine learning model

Software Development Engineer Intern, Amazon, Summer 2019
- Enhanced user interface for third-party sellers in order to improve their Amazon shipping experience
- Created Java framework for propagation of error messages throughout various Amazon services
- Used ReactJS to create improved front-end pages with enhanced error messages

Research Assistant, Computational Linguistics at Yale, Prof. Robert Frank, 2017 – 2020
- Developed and evaluated neural networks connected to several differentiable data structures
- Co-authored "Context-free Transductions with Neural Stacks," which was accepted to the Empirical Methods in Natural Language Processing (EMNLP) conference in 2018
- Co-authored "Finding Syntactic Representations in Neural Stacks," which was accepted to the BlackboxNLP 2019 conference

Research Assistant, Interactive Machines Group, Prof. Marynel Vazquez, 2018 – 19
- Created interactive 3-D simulations in Unity to better model and control robots' actions
- Simulated multi-agent environments to explore the dynamics of pro-social Artificial Intelligence

Researcher, Carnegie Mellon University (Robotics Institute), Summer 2018
- Designed algorithms including mixed-integer linear programming, ant-colony optimization, and a genetic algorithm to order a series of time-specific tasks (variant of "Traveling Salesman Problem")
- Using maximum causal entropy inverse reinforcement learning, taught computers to translate the actions of others into "routines" that can be followed automatically

Analyst, Goldberg Companies, Property Development Team, Summer 2017
- Analyzed competition in local multi-family housing markets and supply-demand dynamics
- Evaluated prospective properties, simulating rent schedules and occupancy levels
- Developed models to help standardize construction processes and reduce costs

Data Science Intern, Supply Clinic, Chicago, Summer 2015
- Designed an automated process for the organization of product offerings
- Formulated metrics and used them to evaluate advertising channels

SKILLS

Programming/Scripting Languages: Python, Java, C, C++, C#, R, LaTeX

Frameworks, Libraries and Other: Unity, Git, Tensorflow, Pytorch, React, AWS