SIMON J. MENDELSOHN
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EDUCATION

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

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, 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 – present
- Developed and evaluated neural networks connected to several differentiable data structures

Research Assistant, Interactive Machines Group, Prof. Marynel Vazquez, 2018 – present
- 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 and 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
- Automated organization of product offerings, formulated metrics for advertising campaign

PUBLICATIONS

William Merrill, Lenny Khazan, Noah Amsel, Yiding Hao, Simon Mendelsohn, and Robert Frank. Finding hierarchical structure in neural stacks using unsupervised parsing. To appear at ACL Workshop BlackboxNLP, 2019a.

Yiding Hao, William Merrill, Dana Angluin, Robert Frank, Noah Amsel, Andrew Benz, and Simon Mendelsohn. Context-free transductions with neural stacks. In Tal Linzen, Grzegorz Chrupała, and Afra Alishahi, editors, Proceedings of the 2018 EMNLP Workshop BlackboxNLP: Analyzing and Interpreting Neural Networks for NLP, pages 306–315, Brussels, Belgium, November 2018. Association for Computational Linguistics. URL https://www.aclweb.org/anthology/W18-5433.

SKILLS

Programming/Scripting Languages: Python, Java, C, C++, C#, R, Racket, LaTeX
Frameworks, Libraries and Other: Unity, Git, Tensorflow, Pytorch, React, Spring, AWS