SIMON J. MENDELSOHN
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EDUCATION

Yale University, New Haven, CT, 2016 – 2020
B.S. in Computer Science and Statistics & Data Science

EXPERIENCE

Software Development Engineer, Amazon, 2020 - Present

- Created a flexible machine learning orchestrator to productionize high-performance models for a variety of Amazon contexts; this orchestrator automates the processes of a) *Data Collection*, b) *Model Training/Validation*, and c) *Batch or real-time inference using the trained model*
- Implemented a system to provide handling time recommendations for Amazon sellers

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 machine learning algorithms for use in varied language contexts:
- Co-authored "*Context-free Transductions with Neural Stack*s," 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
- Co-authored "*Probabilistic Predictions of People Perusing: Evaluating Metrics of Language Model Performance for Psycholinguistic Modeling*", which was accepted to the Cognitive Modeling and Computational Linguistics workshop (CMCL) at EMNLP 2020

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
Frameworks, Libraries and Other: AWS, Git, LaTeX, Pytorch, React (+ Native), Tensorflow, Unity