SAM ACQUAVIVA

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EDUCATION

Massachusetts Institute of Technology (MIT), Cambridge, MA
Candidate for Bachelor of Science degree in Computation and Cognition, May 2023
- Relevant coursework: Algorithms, Signal Processing, Matrix Methods for Machine Learning, Neural Computation
- 4.8/5.0 GPA

RELEVANT EXPERIENCE

John Deere
Machine Learning Intern, June 2021 – Present
- Developed computer vision system to identify corn kernels in a noisy production environment
- Modeled and used reinforcement learning methods to automate skid steer advanced maneuvers

Cloud Canaries
Software Engineer, January 2021 – May 2021
- Created a RabbitMQ and ElasticSearch pipeline for robustly storing large scale customer data
- Built a forecasting system to predict Service Level Agreement compliance for various cloud computing providers

MIT Computer Science and Artificial Intelligence Laboratory
Computational Cognitive Science Group Researcher, May 2020 – Present
- Created data collection platform and a novel bandit algorithm to conduct a large-scale Mechanical Turk study
- Presented original dataset at the Association for the Advancement of Artificial Intelligence 2020 Conference
- Currently developing a latent language model with a group of five postdoctoral researchers that uses the dataset to solve the Abstraction and Reasoning Challenge—a currently unsolved benchmark for artificial general intelligence

PROJECTS

Kandula
Written in Swift and Python, uses Amazon Web Services
- Created API and app that enables anyone to create and customize stock-trading algorithms without programming
- Hosts a plethora of trading algorithms on the cloud involving deep learning and quantitative analysis

Acquacchi Chess Engine
Written in C
- Expands alpha-beta search with heuristics and bit-level algorithms
- Evaluates over 1.5 million positions per second

SKILLS

Technologies: Python, C++, Javascript, Matlab, Swift, C, PyTorch, Simulink, Firebase, Amazon Web Services
Soft Skills: creativity, communication, collaborability, reliability

ACTIVITIES AND EXTRACURRICULARS

MIT Ethical Technology Initiative
Technology Co-Chair and Outreach Co-Chair, September 2020 – Present

MIT Track and Field and Cross Country
Athlete, September 2019 – Present

MIT Class of 2023 Class Council
Vice President, September 2019 – August 2020