

SAM ACQUAVIVA

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samacquaviva.com

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 – September 2021

- 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 – May 2021

- Created data collection pipeline and a novel bandit algorithm to conduct a large-scale dynamic user study
- Collected novel dataset and used collected language data to improve state-of-the-art program synthesis
- Published paper and presented at multiple conferences including AAAI, NLP4Prog, CogSci

PROJECTS

Kandula

Written in Swift and Python, uses Amazon Web Services

- Created API and app that enables anyone to customize stock-trading algorithms without programming
- Hosts a plethora of algorithms on the cloud that make real-time trades

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