# **SAM ACQUAVIVA**

samacqua@mit.edu

978-457-2771

samacquaviva.com

## **EDUCATION**

# Massachusetts Institute of Technology (MIT), Cambridge, MA

Candidate for Bachelor of Science degree in Computation and Cognition, May 2023

- Relevant coursework: Machine Learning, Algorithms, Computational Thinking and Data Science, Neuroscience
- 5.0 GPA

## RELEVANT EXPERIENCE

## **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 carry out 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 benchmark for artificial general intelligence

# St. Paul's Episcopal Church Newburyport

Head of Technology, May 2018 – August 2020

- Redesigned website, reorganized backend infrastructure, and improved security as part of a three person team
- Enabled service live-streaming and secure online donations

# ACTIVITIES AND EXTRACURRICULARS

# **MIT Ethical Technology Initiative**

Technology Co-Chair and Outreach Co-Chair, September 2020 – Present

- Created website and led recruiting efforts to promote the new club
- Currently designing the club's first project to explore dangerous sources of bias in computer vision

# **MIT Track and Field and Cross Country**

Athlete, September 2019 – Present

Maintained full academic rigor while training and competing twenty hours per week, year-round

## **MIT Class of 2023 Class Council**

Vice President, September 2019 – August 2020

- Organized multiple class-wide events for hundreds of students
- Worked with other class councils to successfully negotiate a fairer grading policy in the age of COVID-19

## **PROJECTS**

#### Kandula

Written in Swift and Python, uses AWS 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, PyTorch, C, Swift, Javascript, AWS, Firebase, React *Soft skills:* Creativity, communication, reliability