Matthew Sears

msears825@gmail.com | matthewsears.github.io | 914.434.7065 | Cambridge, MA

EDUCATION

Wentworth Institute of Technology | Boston, MA — Expected Aug. 2019
Bachelor of Science in Applied Mathematics, GPA: 3.87/4.00
Relevant Courses: Probability & Statistics, Multivariable Calculus
(Spring 2018*:* Machine Learning, Advanced Statistics)

Northeastern University | Boston, MA — Sept. 2013 – June 2015
Major in Computer Engineering, GPA: 3.67/4.00
Relevant Courses: Embedded Design for Robotics, Differential Equations & Linear Algebra

SKILLS

Machine Learning: Supervised (Regression, Classification), Unsupervised (Clustering)
Programming: Python (TensorFlow), R, C, C++, MATLAB
Software: Microsoft Office, LaTeX, Mathematica, Git
OS: Windows, MacOS, Ubuntu

EXPERIENCE

Massachusetts Institute of Technology | Cambridge, MA — Oct. 2015 – June 2016
Research/Project Assistant – Personal Robots Group

- Aided in data collection/annotation of child speaker/listener behaviors at Mozart Elementary School
- Developed scripts in an open-source SDK (openSMILE) to extract features of children's speech
- Created a rule-based model in python to classify and help predict potential speaker cues for the social robot Tega to respond appropriately during interactions

Avigilon | Billerica, MA — Jan. – June 2015
Analytics Software/Firmware Developer Co-op

- Debugged and developed the video analytics engine test bench in C++
- Performed validation tests to confirm soundness and efficiency of algorithms
- Created parsing scripts in python for QA to efficiently profile camera performances

Northeastern University | Boston, MA — Oct. 2014 – June 2015
Research Assistant – Computer Architecture Research Lab

- Designed baseline NLP feature extraction algorithms in C (single & multi-threaded CPU) to showcase the capability of multi-threaded GPU algorithms for speech recognition
- Presented publication and results at the 2015 Boston Area Architecture Workshop

ACTIVITIES & MEMBERSHIPS

Wentworth Finance & Investment Club, Quantitative Analyst — 2017 – Current

- Researching and studying machine learning techniques in R for efficient algorithmic trading and to optimize stock portfolio performance

Society for Industrial and Applied Mathematics, Member — 2017 – Current

Institute of Electrical and Electronics Engineers, Member — 2014 – 2016