

EDUCATION

- Stanford University** Stanford, CA
Prospective Major: Computer Science/Math *Sep. 2018 – Present*
CS 107, CS 110: Computer Systems **Math 61CM:** Real Analysis & Linear Algebra
CS 161: Algorithms **Math 62DM:** Group / Number Theory
CS 236: Deep Generative Models
- Thomas Jefferson High School for Science and Technology** Alexandria, VA
Computer Systems Research; GPA: 4.51 *Sep. 2014 – June 2018*

EXPERIENCE

- Communications Engineering Branch, National Institutes of Health** Bethesda, MD
Engineering Intern *June 2017 – Aug. 2017*
 - Research:** Classifying Alzheimer's from fMRI Data using Convolutional Networks
 Developed Inception-ResNet-v2 model to classify Alzheimer's and five stages of cognitive impairment more accurately than previous algorithms.

PROJECTS

- Automating Identification of Terrorist Recruitment on Social Media** *Aug. 2016 – July 2017*
 - Research:** Created algorithm to identify terrorist propaganda accounts. Used convolutional networks for flag and logo identification. Extracted features from captions and used SVMs to classify accounts with over 90% accuracy.
 - Talks:** Presented research at Raytheon BBN and the National Security Agency.
- Towards Fast Generative Compression:** Modifying the pix2pixHD generator to improve inference time while retaining image quality. Experimented with dense blocks, normalization techniques, and downsampling methods. Final project for CS 236.
- Team Smite, MIT Battlecode 2018:** Wrote pathfinding, combat, and communications algorithms and heuristics in Java. Won \$1750 in prize money and placed 9th overall in 2018 tournament.

ACTIVITIES

- TJHSST Machine Learning Club** Alexandria, VA
Co-founder and Captain *Sep. 2016 – June 2018*
 - Teaching:** Wrote and presented 100+ pages of lectures on machine learning to teach other students the theory behind ML. Developed weekly Kaggle InClass competitions, giving students the opportunity to apply lecture material to real-world datasets.
 - Outreach:** Procured sponsorships from Intel, Yext, and TJ Partnership Fund for computational resources.

AWARDS

- Regeneron STS Scholar *2018*
- Intel International Science and Engineering Fair Finalist *2017*
- Siemens Competition Semifinalist *2016*

SKILLS

- Languages:** Python, Java, C, HTML, CSS, Javascript, \LaTeX
- Libraries:** Pytorch, Keras, Tensorflow, three.js
- Technologies:** Git, Google Compute Engine, Google Analytics