

Work History

- 2020-06 Present** **AI Integrations & Development Intern**
Cortex-Vertical, Englewood Cliffs, NJ
-Implemented Tesseract for character recognition for names on a jersey
-Used RCNNs to detect and match players to their photos to the metadata
-integrated ffmpeg to divide the video into several jpg images for the model to read
- 2020-02** **10-716 Teacher Assistant**
2020-05 *Machine Learning Department, Pittsburgh, PA*
-Adjusted homework assignments through LaTeX for it to portray difficulty of the class
-Increased student and teacher assistant communication by 15% through forms and piazza
- 2019-11** **Machine Learning Research Assistant**
2020-03 *AiPEX Lab, Pittsburgh, PA*
-Utilized parallel Q-Learning using multiprocessing to reduce learning rate by 50%
-Implemented Q-learning & multi-armed bandit to navigate randomized location of a goal
- 2019-06** **Data Science/Full Stack Intern**
2019-09 *CertAInBuild, Remote*
-Developed a MVP and used as a demonstration to potential stakeholders and vision
-Utilized Sklearn and SQL Alchemy to create predictions for building costs for new data
-Incorporated Flask, html, CSS, and bootstrap to create the interface of the MVP
- 2016-06** **Teacher Assistant**
2018-08 *M.E.K Review, Palisades Park, NJ*
-Taught other Teacher Assistants to be efficient, resulted in 30% in workflow
-Developed habits and improved grading efficiency and accuracy by 20%

Projects

- Summer 2020** **Stock Price Analysis (In Progress)**
-Created Interface for stock price data feed for analysis of the data using Python & Git
-Implemented the perspective open source code using React and Typescript
-Displayed data visually for traders to create a chart for trader's dashboard
- Spring 2020** **Expectancy Run Charts**
-Cleaned 1000+ NCAA Division 3 Softball Games of data into an R-shiny app
-Derived probabilities of bunting and stealing for any state of the game
-Developed text analysis that analyzes 600,000+ different play-by-play data using
- Fall 2019** **Estimated Taxi Travel Time**
-Extracted new features based on Taxi-Zone location within New York City
-Utilized Neural Networks in order compare it to other algorithms through Sklearn
-Reduced RMSE by 99% from simple linear regression to XGBoost in prediction
- Fall 2019** **Gotta Graph Them All**
-Implemented PCA to differentiate types of Pokémon based on base stats using kernlab
-Extracted Pokémon base stats to see the distributions between each of Pokémon
-Produced graphics that display different attributes of the Pokémon Kaggle using ggplot
- Spring 2018** **PVP Platform**
-Created enemies that had different mechanics to be an obstacle for a PvP game
-Implemented 4 different classes that have different skills and attributes
-Created interface for players to interact with using tkinter
- Fall 2017** **League of Legends eSports: NA Challenger**
-Utilized Massey and Colley method to visualize ranking results of all teams
-Collected data that portrays kill-death ratio and win-loss ratio by accumulating matches

Education

BS in Statistics & Machine Learning
Carnegie Mellon University | GPA: 3.24
Expected Graduation: May 2021
Additional Major: Cognitive Science
Minor: Computer Science

Skills

Programming
Python: Proficient
R: Intermediate
C: Intermediate
SML: Intermediate
Java: Intermediate
SQL: Intermediate

Coursework

Past Coursework:
Machine Learning (10-701)
Functional Programming (15-150)
Algorithms & Data Structures (15-122)
Advance Data Analysis (36-402)
Modern Regression (36-401)
Stat Computing (36-350)
Stat Visualization & Graphics (36-315)
Probability Theory (36-217)
Calculus in 3D (21-259)
Matrix Algebra (21-241)
Math Concepts & Proofs (21-128)
Modal Logic (80-315)
Cognitive Psychology (85-211)
Analytic Research Methods (85-330)

Future Coursework:
Reinforcement Learning (10-703)
Algorithms & Adv Data Structures (15-351)
Learning in Humans & Machines (85-426)
Language & Thought (85-421)

Extracurriculars

Lunar Gala: Model
Central Church: Bible Study Leader
CMU Powerlifting: President,
State Champion