

# Sean Jin

Phone: (201) 580-1534  
E-mail: [seanj@andrew.cmu.edu](mailto:seanj@andrew.cmu.edu)  
Linkedin: [sean-d-jin](#)  
Github: [seanjincmu/myprojects](#)  
Instagram: [s.jinramen](#)

Passionate in making an impact through product management, software engineering, and data science on communities and businesses. Seeking internship opportunities in product management, data science, and software engineering.

## Work History

**2020-02**  
**Current**

### 10-716 Teacher Assistant

*Machine Learning Department, Pittsburgh, PA*

- Adjusted Machine Learning homework assignments through LaTeX for it to portray the proper difficulty of the class
- Increased student and teacher assistant communication by 15% through communication from forms and piazza

**2019-11**  
**Current**

### Machine Learning Research Assistant

*AiPEX Lab, Pittsburgh, PA*

- Incorporated Q-Learning by parallel processing using multiprocessing package to decrease learning rate by 50%
- Created a gym environment to visualize hierarchical machine learning through Q-learning and multi-armed bandit processing

**2019-06**  
**2019-09**

### Data Science/Full Stack Intern

*CertAIInBuild, Remote*

- Developed a MVP and was used as a demonstration to potential stakeholders and vision for the company
- Applied multiple packages such as Sklearn, Flask, and SQL Alchemy and used Python, HTML, Javascript, CSS, and SQL in order to create the MVP
- Incorporated a scrum-like frame work, so UML diagrams and use cases can fill up the sprints leading up to development of an MVP

**2016-06**  
**2018-08**

### Teacher Assistant

*M.E.K Review, Palisades Park, NJ*

- Taught other Teacher Assistants in becoming efficient with workflow, which resulted in an increased overall workflow among Teacher Assistant by 30%
- Developed habits and improved grading efficiency and accuracy by 20% with no assignments returned

## Projects

**Spring**  
**2020**

### Expectancy Run Charts

- Utilized Markov Chains to get the expected runs for NCAA Division 3 Softball Games
- Cleaned data collection by converting the lists of games of over 1000 games into parameters of the states and actions of any NCAA Division 3 Softball Games
- Derived probabilities of certain actions such as bunting and stealing for any state of the game

**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 Machine Learning Algorithms through sklearn

**Fall**  
**2019**

### Gotta Graph Them All

- Implemented PCA in order to differentiate Legendary and non-legendary Pokémon based on stats
- Extracted Pokémon base stats in order to see the individual distributions between each of Pokémon

**Spring**  
**2018**

### PVP Platform

- Established different types of enemies that had different mechanics to be an obstacle for a PvP game
- Implemented 4 different classes of characters that allowed players to pick from that have different skills



## Education

### BS in Statistics & Machine Learning

Carnegie Mellon University  
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 (PhD)  
Modern Regression  
Stat Computing  
Stat Visualization & Graphics  
Probability Theory  
Algorithms & Data Structures  
Functional Programming  
Math Concepts & Proofs  
Calculus in 3D  
Matrix Algebra

### Present Coursework:

Analytic Research Methods  
Advance Data Analysis  
Modal Logic  
Sports Capstone

## Extracurriculars

**Lunar Gala:** Model

**Central Church:** Bible Study Leader

**CMU Powerlifting:** President,  
State Champion