

Austin Leung

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Education

Carnegie Mellon University

Pittsburgh, PA

- **Bachelor of Science: Double Major in Information Systems and Computer Science**

Class of 2022

- Quantitative Social Science Scholars Program

GPA: 4.0/4.0

- Relevant Coursework: Principles of Imperative Computation (TA), Fundamentals of Programming and CS, The Information Systems Milieux, Methods for Statistics & Data Science, Reasoning with Data

Professional Experience

Carnegie Mellon University School of Computer Science

Pittsburgh, PA

15-122 Principles of Imperative Computation Teaching Assistant

Aug 2019 – Present

- Teach topics focusing on fundamental computer science concepts such as abstraction, correctness, complexity, modularity, and memory management through use of complex data structures and algorithms in C
- Lead weekly recitations, supervise labs, and hold office hours while coordinating with professors on curriculum

MultiComp Lab - Carnegie Mellon University School of Computer Science

Pittsburgh, PA

Data Research Assistant

May 2019 – Present

- Run data crawling mechanisms with web-and python-based libraries retrieving data from APIs
- Build multilayer perceptrons and convolutional neural networks with PyTorch to extract computational descriptors and detect multimodal patterns

Adagio Digital Guitar School

Pittsburgh, PA

Technology Intern

May 2019 – Present

- Lead initial design and development of Adagio's website and features to reach minimum viable product for customers and investors
- Analyze competition and guitar market to help determine essential qualities of Adagio's digital guitar learning experience and prioritize website features
- Create a progress tracker for guitar learning based on successful elements of other gamified e-learning services

Projects

The Reddit Sentiment Analyzer 1st Place - CodeDay Pittsburgh Spring 2019

- Utilized IBM's Tone Analyzer API with Express.js and Node.js to analyze the overall sentiment of a website's comments and submissions with colors corresponding to different emotions and intensities
- Built a web app and Google Chrome extension using React to visualize colorized sentiment of subreddit submission titles, comment chains, or a user's activity retrieved from the Reddit API

AI Mahjong

- Developed a fully functional Mahjong game with multiplayer functionality within a Python GUI
- Designed a strong artificial intelligence process with heuristic values and game trees to suggest optimal moves for a user-centric assist mode training player strategy

Find the Sets

- Created a time-based game in Java and Processing matching sets of images based on shape, color and background properties
- Implemented a feature that assesses and tailors game difficulty to the player's reaction time

Who's That Pokémon?

- Trained a multilayer perceptron and convolutional neural network using PyTorch to recognize images of over 900 Pokémon

Programming Languages

Proficient: Python (PyTorch), C, HTML, CSS

Familiar: Java, JavaScript (React, Node, Express, jQuery), SQL (MySQL), R