Austin Leung

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Education

Carnegie Mellon University *Pittsburgh, PA*
B.S. – Double Major in Information Systems and Computer Science (GPA: 4.0/4.0) *Aug 2018 – May 2022*
- Quantitative Social Science Scholars Program
- Relevant Coursework: Principles of Imperative Computation (TA), Fundamentals of Programming and CS, The Information Systems Milieux

Professional Experience

Carnegie Mellon University School of Computer Science *Pittsburgh, PA*
Teaching Assistant - 15-122 Principles of Imperative Computation *Aug 2019 – Present*
- Teach imperative programming and methods for ensuring correctness of programs through specific applications to data structures and algorithms in C
- Lead weekly labs, participate in grading sessions, and hold office hours for over 500 students

MultiComp Lab - Carnegie Mellon University School of Computer Science *Pittsburgh, PA*
Data & Machine Learning Research Assistant *May 2019 – Present*
- Explore web data crawling mechanisms to compile and release multimodal datasets
- Build deep learning 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 initial features to reach minimum viable product for customers and investors
- Analyze competition to help determine essential qualities of Adagio's digital guitar learning experience and prioritize website features

Projects

The Reddit Sentiment Analyzer (1st Place - CodeDay Pittsburgh Spring 2019)
- 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
- Utilized IBM's Tone Analyzer API with Express.js and Node.js to analyze comment and submission text, assigning colors corresponding to different emotions and intensities

Stork
- Created a web platform to connect people in need with supplies during times of disaster
- Integrated React and Google Maps API for the front-end with Google Firestore, Websocket, and Flask for the back-end to create a real-time display of victim location and needed items

Who's That Pokémon?
- Trained a multilayer perceptron and convolutional neural network using PyTorch to recognize images of over 900 Pokémon

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

Technical Skills

Programming: Python, C, HTML, CSS, JavaScript, Java, SQL, R
Technologies and Applications: Git, PyTorch, React, Node.js, Express.js, jQuery, MySQL, PostgreSQL