Peter Wu

✉ peterlingwu@gmail.com   ⊕ https://peterlwu.com   ☎ (609) 508-7717   in peterlingwu   ⊙ ptwu

Education

Cornell University   Aug. 2019 - Current
Bachelor of Science in Computer Science 2023
Relevant Coursework: Object-Oriented Programming & Data Structures, Discrete Structures, Multivariable Calculus, Functional Programming, Linear Algebra, Analysis of Algorithms, Machine Learning Intelligent Systems, Probability & Statistics, Computer Organization & Systems Programming, Computer Vision

Skills / Awards

Programming Languages: Java, Python, JavaScript, TypeScript, C++, HTML/CSS, OCaml
Technologies: (Machine Learning / Data Science) NumPy, Pandas, scikit-learn, TensorFlow, (Software Engineering) CI/CD, React, Redux, Git, Node.js, Firebase, Express, WebSockets, Docker, AWS
Awards: USA Computing Olympiad Gold Division, Cornell Math Contest in Modeling Runner-Up Winner, Dean's List (all possible semesters), USA Biology Olympiad Semifinalist, Best Webapp Award at HackMHS IV

Experience

Google, *Software Engineering Intern*   June 2021 - Aug. 2021
- Provided more actionable intelligence to users of Ads custom bidding by discovering unvisited code in Python bidding strategies, which interfaces with machine learning models to optimize marketing objectives.
- Instrumented script execution and model parsing pipelines in the C++ and Java backend, while supporting a backwards-compatible server migration in the process.
- Implemented frontend data visualization in Angular, iterating on mockups with a UX team, to give a more holistic view of impressions to over 66% of custom bidding users.

Cornell University, *Teaching Assistant*, Ithaca, NY   Jan. 2020 - Current
- Fall 2021: Machine Learning (300+ students)
- Fall 2020 - Spring 2021: Functional Programming (400+ students)
- Spring 2020 - Spring 2021: TA and Co-Instructor of Trends in Web Development (30+ students)

Cornell Design & Tech Initiative, *Technical Product Manager*, Ithaca, NY   Oct. 2019 - Current
- Developing Samwise, an online student planner, with a cross-functional team of designers, product managers, and developers. The app currently has over 200 active users.
- Creating responsive frontend and UI with React and TypeScript interacting with a Redux store, while following the Git branching and CI/CD workflow.

MBS Accounting Technology & Advisory, *Developer Intern*, New York, NY July 2019 - Aug. 2019
- Developed a mobile-responsive webapp for a "Client Hub" with a React + Express + Node.js stack, building mobile-responsive UI components interacting with backend API endpoints. Delivered for use by the firm's 180+ clients.

Projects

Distributed Texas Hold 'Em Poker | Node.js, socket.io, Express   Apr. 2020
Webapp allowing for players across multiple devices to join rooms and play Texas Hold 'Em poker. Implemented using Node.js and websockets (socket.io) for real-time gameplay.

fitme | TypeScript, Python, React, MongoDB, Flask, Docker, PyTorch   Dec. 2020
Platform and social network for fashion using computer vision to segment outfit images, powered by a pretrained ML model microservice and accessible through a responsive React UI. Demo Video.

Election County Prediction | TensorFlow, NumPy, Pandas, scikit-learn   Dec. 2020
Comparing effectiveness of ML algorithms such as SVMs with deep neural networks to classify counties in the U.S. presidential election. Placed 5th out of 173 in the class overall in CS 4780 - Machine Learning for Intelligent Systems.