

# Peter Wu

✉ plw53@cornell.edu 🌐 <https://peterlwu.com> ☎ (609) 508-7717 in peterlingwu 📄 ptwu

## Education

### Cornell University

Aug. 2019 - Current

B.S. Computer Science (anticipated May 2023)

GPA: 3.97 | Relevant Coursework: Data Structures, Discrete Structures, Functional Programming, Linear Algebra, Analysis of Algorithms, Machine Learning, Probability & Statistics, Computer Organization & Systems Programming, Computer Vision, Advanced Machine Learning Systems\*, Operating Systems\*, Simulation Modeling & Analysis\* (\* = in progress)

## Skills / Awards

**Programming Languages:** Java, Python, JavaScript, TypeScript, C++, HTML/CSS, OCaml

**Technologies:** (Machine Learning / Data Science) NumPy, Pandas, scikit-learn, TensorFlow, PyTorch, (Software Engineering) CI/CD, React, Redux, Git, Node.js, NoSQL Databases (Firebase, MongoDB), Express, WebSockets, Docker, AWS, Testing

**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 - present: 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.