## **Charley Cunningham**

New York, NY • ccunning@seas.upenn.edu • <u>charleycunningham.com</u> • [private info redacted, for website] See the <u>projects</u> section of my website for more detail on the projects described below, and more!

### **Education**

### UNIVERSITY OF PENNSYLVANIA

Philadelphia, PA

Bachelor of Science in Engineering, Computer Science • GPA: 4.0/4.0

2023

TRINITY HIGH SCHOOL

New York, NY

Trinity Hawley Prize (Top 3 Academic Record) • Trinity School Prize for Robotics • Trinity School Prize for Excellence in Physics • Captain of the Robotics Team •

2019

SAT: 1580/1600 • SAT2 Math II: 800/800 • SAT2 Physics: 800/800

**Experience** 

ORCHARD

**Data Science Intern** 

Remote (due to COVID-19) May 2020 – August 2020

Orchard is a real estate technology startup transforming the way people buy and sell homes in the United States

- Envisioned, proposed, and implemented a highly optimized convolutional neural network model development <a href="mailto:pipeline">pipeline</a> (using Python, AWS, boto3, S3, Linux, Keras, TensorFlow 3, Jupyter, pandas, SQL, Flask, and multiprocessing, among other technologies). Improved the speed, cost, reproducibility, provenance, organization, robustness, and intuitiveness of the model development process.
- Received commendation from the company's Head of Investments and Data Science: "Your vision for the reproducibility pipeline was extraordinarily big, and, as importantly, you delivered on it."
- Developed 3 convolutional neural network models to > 90% accuracy, now used in the core pricing model.

# PENN LABS Penn Courses Team Lead, Backend Developer

Philadelphia, PA September 2019 – Present

- Lead the 12-person Penn Courses Team. We develop and maintain Penn Course Plan (used by ~5000 students to plan their schedules and course selections), Penn Course Alert (used by students to sign up for an alert when a full class opens up), and the Penn Courses API (which also serves as the backend of Penn Course Review, a product used by students to browse university-collected course review data).
- Currently working on analytics to help students gauge course selectivity, design their advanced registration rankings optimally, and better plan for open registration. Also working on anonymized course trade suggestions.
- Developed the Django REST backend and data architecture for <u>Penn Course Plan</u> and <u>Penn Course Alert</u> (as part of the Penn Courses API), coordinating closely with biz-dev, designers, and frontend.
- Programmed an <u>auto-docs system</u> for our three Penn Courses products and added to in-code comments (used by the auto-docs), resulting in a detailed, thorough, and always-up-to-date spec/documentation for the Penn Courses API.

# WHARTON MANAGEMENT CLUB

Philadelphia, PA

**Head of Consulting** 

October 2019 - Present

- Head WMC's 53-person consulting committee. Plan and lead biweekly committee-wide meetings. Supervise consulting projects. Manage talent acquisition and team lead promotion. Oversee the client acquisition team.
- Lead a team of 10 members in a project for Sapient (a company creating a plug load management and analytics system for offices), researching and analyzing potential strategic partnerships.
- Formerly led the club's marketing committee. Created multiple sub-teams for promoting speakers and events, searching for recruiting partnerships and opportunities for club members, and managing internal communications.
- Proposed and created the club website (whartonmanagementclub.com) before promotion to head of marketing.

### PENN BUSINESS ROUNDTABLE

Philadelphia, PA

**Vice President** 

September 2019 – Present

• Acquire speakers and help manage club operations. Created the club website (pennbusinessroundtable.com).

### **Fun Facts**

- I hold pilot's ratings in single and multi-engine land categories, with instrument ratings in both
- I also hold a part 107 rating for commercial operation of unmanned aerial systems