Brandon Lin

+1 (347) 886 4714
branlin@seas.upenn.edu
http://brandonlin.com

Programming
- Python
- Java
- LaTeX
- HTML/CSS/JS
- Bash
- MATLAB
- PHP/Hack

Frameworks
- Flask
- Scikit-learn
- Node
- MongoDB
- Processing

Applications
- Git
- Mercurial
- GIMP
- Cyberlink PowerDirector

Operating Systems
- Ubuntu Linux
- Windows

Interests
- ML/AI
- Rubik's Cube
- Music
- Origami

Education

University of Pennsylvania — School of Engineering & Applied Science — Philadelphia, PA
B.A.S. Computer Science | Minors: Statistics [Wharton] & Mathematics — May 2020
- Coursework: Introduction to Computer Architecture, Probability, Abstract Algebra I Machine Learning, Big Data Analytics, Advanced Geometric Methods in CS — 3.99/4.00

Stuyvesant High School — New York, NY
Advanced New York State Regents Diploma — June 2016
- Honors: AP Scholar with Distinction — 4.00/4.00

Research Experience

The Steam Engine | brandonlin.com/steam.pdf — March 2018 - May 2018
- Machine learning research paper on applying collaborative filtering methods to Steam game recommendations
- One of top 3 group research projects in UPenn's machine learning class (CIS 520 Spring 2018)
- Employed novel matrix factorization, neighborhood, and boosting models to accurately predict hours of play time

UPenn, NLP Research Assistant, Philadelphia, PA — February 2018 - present
- Natural language processing research assistant working with Professor Dan Roth
- Investigating clustering methods as a way to better understand word representations and embeddings

Professional Experience

Facebook, Software Engineering Intern, Menlo Park, CA — May 2018 - present
- Currently working on the Dynamic Ads team (E-Commerce)

CIS 160 (Discrete Mathematics), Teaching Assistant, Philadelphia, PA — January 2018 - present
- Work and help students to broaden understanding of discrete mathematics through recitations and office hours
- Write, review, and grade homework problems in topics such as combinatorics, proof techniques and graph theory
- Assist in teaching at TA review sessions to aid studying for examinations

Penn Labs, Project Manager, Dev Ops & Software Engineer — Oct 2016 - April 2018
- Managed deployment and fixed Django bugs for Penn Course Review as part of semesterly data updates
- Developed new features in Python for the API of the widely-used Penn Mobile app

Projects

MultiCuber | github.com/esqu1/MultiCuber — June 2017 - present
- (Node.js, MongoDB) An international platform for online friendly speedcubing competitions
- Used Semantic UI to create front-end layout of competition rooms and Express for routing web traffic

Penn Python SDK | github.com/pennlabs/penn-sdk-python — Oct 2016 - Nov 2016
- (Flask) Developed features showing open study spaces, the Penn calendar, and laundry machine usage
- Incorporated new features into the Penn Mobile app, increasing user base by over 3000 students

Awards and Achievements

- **4-time Guinness World Record Holder** for Square-1 Average (Rubik's Cube)
- **USA Computing Olympiad** Gold Division Qualifier
- **YouTube** Creator (6 years) w/ over 3000 subscribers
- **American Invitational Math Examination (AIME)** Qualifier (2013-2016)

Leadership & Volunteer Experience

Philadelphia Classic, Competition Organizer — September 2017 - present
- Write programming competition questions that encourage student thinking in various algorithmic paradigms
- Assist in day-of operations including answering questions, selling apparel, and hosting awards ceremony

World Cube Association (WCA), Volunteer & Competition Organizer — July 2011 - present
- Volunteered at over 20 regional competitions, leading competitor experience facilitation
- Organized first speedcubing competition at Penn since 2009, attracting over 100 competitors worldwide