

## Programming

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

## Frameworks

- PyTorch
- Flask
- OpenCV
- Scikit-learn
- Node

## Applications

- Git
- Mercurial

## Operating Systems

- Ubuntu
- Windows

## Interests

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

## Education

<b>University of Pennsylvania — School of Engineering &amp; Applied Science</b>	Philadelphia, PA
Master of Science in Engineering (MSE) in Data Science	May 2020
○ <u>Coursework</u> : Advanced Deep Learning, Internet and Distributed Web Systems, Big Data Analytics	3.99/4.00
Bachelor of Applied Science (BAS) in Computer Science	May 2020
○ <u>Minors</u> : Statistics [Wharton] & Mathematics	
○ <u>Coursework</u> : Algorithms, Database Systems, Computer Architecture, Abstract Algebra	
<b>Stuyvesant High School</b>	New York, NY
Advanced New York State Regents Diploma	June 2016
○ <u>Honors</u> : AP Scholar with Distinction	4.00/4.00

## Professional Experience

<b>Facebook</b> , Software Engineering Intern, Menlo Park, CA	May 2019 - present
○ SWE Intern on Facebook's <b>artificial intelligence</b> infrastructure (FBLearner) team	
<b>CIS 520 (Machine Learning)</b> , Teaching Assistant, Philadelphia, PA	January 2019 - May 2019
○ Hold weekly recitations and office hours for teaching topics such as supervised/unsupervised learning, probabilistic graphical models and structured prediction	
<b>Facebook</b> , Software Engineering Intern, Menlo Park, CA	May 2018 - August 2018
○ Provided foundation for Dynamic Ads team A/B test for new video ads format	
○ Fixed product recommendation duplication that increased efficiency and eliminated recommendation timeouts	
○ Created a Messenger-style internal bot that collects team member standups for accessible project transparency	
<b>CIS 160 (Discrete Mathematics)</b> , Teaching Assistant, Philadelphia, PA	January 2018 - May 2019
○ 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	
<b>Penn Labs</b> , PM, Dev Ops & Software Engineer, Philadelphia, PA	October 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 & Research Experience

<b>Deep Learning in Machine Comprehension</b>   <a href="http://brandonlin.com/cis700project.pdf">brandonlin.com/cis700project.pdf</a>	April 2019
○ Machine learning research paper on improving deep architectures for cloze-style reading comprehension	
○ Used <b>PyTorch</b> to develop novel architectures using attention models for bidirectional LSTMs	
<b>The Steam Engine</b>   <a href="http://brandonlin.com/steam.pdf">brandonlin.com/steam.pdf</a>	March 2018 - May 2018
○ Machine learning research paper on applying <b>collaborative filtering</b> 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	

## Awards and Achievements

- **4-time Guinness World Record Holder** for Square-1 Average (Rubik's Cube)
- **USA Computing Olympiad** Gold Division Qualifier
- **YouTube** Creator (8 years) w/ over 3000 subscribers
- **William Lowell Putnam Competition** Top 250 Finisher

## Leadership & Volunteer Experience

<b>Philadelphia Classic</b> , Competition Organizer, Philadelphia, PA	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	
<b>World Cube Association</b> , Competition Organizer, Various Locations	July 2011 - present
○ Organized first speedcubing competition at Penn since 2009, attracting over 100 competitors worldwide	
○ Volunteered at over 20 regional competitions, leading competitor experience facilitation	