# Brandon Lin

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http://github.com/esqu1

#### Programming

- o Proficient in:
  - Python
  - Java
  - LATEX
  - HTML/CSS
  - Bash
- o Knowledge of:
  - JavaScript
  - SQL
  - C/C++
  - GoLang
  - MATLAB
  - Scheme

#### Frameworks

- Flask
- o Node
- MongoDB
- o Cassandra
- Django
- Processing
- o Jinja2
- o Jekyll

## **Applications**

- Git
- GIMP Cyberlink
- PowerDirector

## **Operating Systems**

- Ubuntu Linux
- Windows

### Interests

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

## Education

2016–2020 University of Pennsylvania, School of Engineering & Applied Science

Candidate for B.S.E. in Mathematics and Computer Science in May 2020 – GPA: 4.00/4.00

o Minor: Statistics (Wharton)

2012–2016 Stuyvesant High School, New York, NY

Advanced NYS Regents Diploma – GPA: 4.00/4.00

## Professional Experience

Oct 2016–present Penn Labs, Software Engineer

 Managed deployment and fixed Django bugs for Penn Course Review, Penn's online platform for course/professor ratings used by nearly all undergraduates

o Developed new features in Python for the Penn Mobile app's API

Oct 2016–present Art of Problem Solving, Teaching Assistant

o Assisting instructors by grading student solutions to various olympiad math classes

o Served as an in-class assistant for Introduction to Python, answering student questions

June-Aug 2017 Microsoft, Technical Account Mentee, New York, NY

 Shadowed Technical Account Managers to gain insight into the enterprise-facing side of software development at Microsoft

 Used Microsoft Bing Speech API & Python to present on sign language translation infused into Microsoft products as part of Microsoft's hackathon

May-Aug 2017 Gray Matter, Software Engineer

 Developed a back-end API/database for a full-fledged chat application written in GoLang and Cassandra

## Leadership & Volunteer Experience

Oct 2016–present Penn Cubing, President

o Expanded the speedcubing community at Penn through teaching events and meetings

Sep 2015–June 2016 Stuyvesant HS Computer Science Dojo, Leader/Sensei

 Tutored students of Introduction to Computer Science and AP Computer Science in daily after-school sessions, nearly doubling CS involvement at Stuyvesant HS

July 2011–present World Cube Association (WCA), Volunteer & Competition Organizer

Volunteered at over 20 regional competitions, assisting in competitor experience facilitation

 Organized first speedcubing competition at Penn since 2009, attracting over 100 competitors worldwide

o Organized NYC speedcubing competition that saw a 50% increase in competitor count

# **Projects**

June 2017 MultiCuber

 (Node.js, MongoDB) Used socket.io to make multiplayer chat rooms for speedcubers to compete: https://github.com/esqu1/MultiCuber

May 2017 WCA Rankings Sorter

 (Flask, JavaScript) Developed an API that obtains data from the WCA, providing a better visualization of rankings: https://github.com/esqu1/wca-ranking-sorter

June 2014 VirtCube

 (Processing) Implemented mechanics and a timer for a virtual Rubik's Cube: http://github.com/esqu1/ProjectAPCS

## Awards and Achievements

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