

# Brandon Lin

## Software Developer

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http://brandonlin.com

http://github.com/esqu1

### Programming

- Proficient in:
  - Python
  - Java
  - LaTeX
  - HTML/CSS
  - JavaScript
  - Flask
  - Bash
- Knowledge of:
  - MySQL
  - NoSQL
  - Node.js
  - Django
  - C/C++
  - Haskell
  - Processing
  - MATLAB
  - Jinja2
  - Jekyll

### Applications

- Git
- GIMP
- Cyberlink PowerDirector

### Operating Systems

- Ubuntu Linux
- Windows

### Interests

- Machine Learning
- AI
- Rubik's Cube
- Music
- Videography

## Education

- 2016–present **University of Pennsylvania, School of Engineering & Applied Sciences**  
**Candidate for B.S.E. in Computer & Information Science** in May 2020 – GPA: 4.00/4.00
  - Minors: Statistics (The Wharton School), Mathematics (School of Arts & Sciences)
- 2012–2016 **Stuyvesant High School, New York, NY**  
**Advanced NYS Regents Diploma** – GPA: 4.00/4.00

## Professional Experience

- 2016–present **Penn Labs, Software Developer**
  - Managed deployment and fixed Django bugs for Penn Course Review, Penn's online platform for course/professor ratings used by nearly all undergraduates
  - Developed new features in Python for the Penn Mobile app's API
- 2016–present **Art of Problem Solving, Teaching Assistant**
  - Assisting instructors by grading student solutions to various olympiad math classes
  - Served as an in-class assistant for Introduction to Python, answering student questions

## Leadership & Volunteer Experience

- 2016–present **Penn Cubing, President**
  - Expanded the speedcubing community at Penn through teaching events and meetings
- 2015–2016 **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
- 2014–2016 **Stuyvesant HS Speed Cubed, President**
  - Organized citywide speedcubing competitions that saw a 50% increase in competitor count
- 2011–present **World Cube Association (WCA), Volunteer & Competition Organizer**
  - Volunteered at over 20 regional competitions, assisting in numerous tasks such as judging, scrambling, and data entry
  - Organized first speedcubing competition at Penn since 2009, attracting over 100 competitors worldwide

## Projects

- 2017 **MultiCuber**
  - (Node.js, MongoDB) Used socket.io to make multiplayer chat rooms for speedcubers to compete: <https://github.com/esqu1/MultiCuber>
- 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>
- 2017 **PennCourseLMK, Penn Labs**
  - (Node.js, MongoDB) Created an easy-to-use searchbar for Penn's courses, and implemented a email bot within Node.js
- 2014 **VirtCube**
  - (Processing) Implemented mechanics and a timer for a virtual Rubik's Cube: <http://github.com/esqu1/ProjectAPCS>

## Awards and Achievements

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