

Brandon Lin

Software Engineer

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http://brandonlin.com

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

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

Applications

- o Git
- o GIMP
- o Cyberlink PowerDirector

Operating Systems

- o Ubuntu Linux
- o Windows

Interests

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

- May–Aug 2017 **Gray Matter, Software Engineer**
 - o Developed a back-end API/database for a full-fledged chat application written in GoLang and Cassandra
 - o Set product specifications and deadlines for project management
- June–Aug 2017 **Microsoft, Technical Account Mentee**, New York, NY
 - o Shadowed Technical Account Managers to gain insight into the enterprise-facing side of software development at Microsoft
 - o Used Microsoft Bing Speech API & Python to present on sign language translation infused into Microsoft products as part of Microsoft's hackathon
- Oct 2016–present **Penn Labs, Software Engineer**
 - o 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

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**
 - o 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**
 - o Volunteered at over 20 regional competitions, assisting in competitor experience facilitation
 - o 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**
 - o (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**
 - o (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**
 - o (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
- o USA Computing Olympiad Gold Division Qualifier
- o American Invitational Math Examination (AIME) Qualifier (2013-2016)