Kevin Mao

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ACADEMICS

Columbia University: School of Engineering and Applied Science: First-year

2017-present

- Bachelor of Science: Computer Science Major, Biomedical Engineering Minor
- Cumulative GPA: 3.5

Staten Island Technical High School: Graduated

2013-2017

- Cumulative Average: 98.5, Cumulative Weighted Average: 102.91
- SAT: 760 Math, 710 Verbal, 770 Writing

Skills: Python, Java, Git/Github, HTML, CSS, MatLab, Microsoft Office

RESEARCH/ENGINEERING PROJECTS

Paean Health: Columbia SEAS Design Challenge Winner

2017-present

- Co-founded Paean Health, a start-up that won \$2,500 in funding from Columbia Engineering Entrepreneurship
- Developing the X-Pouch, a small insert for medication bottles that deactivates unused pills for safe disposal

Neurotrauma and Repair Lab at Columbia University

2017-present

- Conducting research on molecular mechanisms by which traumatic brain injury leads to cognitive impairments
- Fed brain tissue cultures, conducted enzyme treatment experiments, and used tissue staining analyses

Robotics: Brain Computer Interface Project

2017-present

• Developing an interface that interprets EEG brain signals using machine learning

NYU Langone Medical Center: Lin Lab

2015-2017

- Submitted to the Regeneron Student Talent Search, and received the STS Research Report Badge
- Conducted research on the hypothalamus's ability to regulate innate social behaviors, such as aggression
- Analyzed the behavior of mice using video, optogenetics, fiber photometry data, and fluorescent imaging

Cooper Union Summer Stem Program: Saving the World

Summer 2016

- Increased solar panel efficiency by designing a cooling system using infrared filters and thermoelectric modules
- Gained experience collaborating with peers on an engineering project

College of Staten Island: Tang Lab

Summer 2015

- Contributed to a paper published in the journal, *Physical Chemistry Chemical Physics*
- Participated in research on the effect of ions on the NMR spectra of bicelles (plasma membrane mimetics)

LEADERSHIP EXPERIENCE

Biomedical Engineering Society: Organizational Committee Member, Web Developer

2017-present

- Organizing events to expand community involvement in healthcare, such as the Biotech Panel and HealthHacks
- Developed the organization's website and HealthHacks website

Tech Science Times: President, Founder

2015 -2017

- Published interesting articles in online science magazine that sparked scientific interest among student body
- Inspired peers to explore their interests by leading discussions and mentoring them in technical writing

Science Olympiad: Biology Captain

2015-2017

- Participated in Regional and State Competition in biology events, such as Protein Modeling and Invasive Species
- Tutored underclassmen in biology, organized study groups, and motivated

EXTRACURRICULARS

Columbia Pops Orchestra (Tenor Saxophone)

2017-present

• Arranged music for chamber ensembles and performed them at major events like Glass House Rocks

Staten Island Tech Bands: Wind Ensemble, Jazz Ensemble, Spring Musical

2013-2017

- Helped Jazz Ensemble receive the first Gold with Distinction at the NYSSMA music festival in school history
- Member of the 2016 and 2017 New York City Wide Honors High School Concert Band