

Scott Geng

scott.geng@columbia.edu ❖ (443) 939-9246 ❖ Baltimore, MD

EDUCATION

Columbia University

B.A. Computer Science and Biology

Expected May 2023

New York, NY

- GPA: 4.1/4.0
- Relevant Coursework: Honors Data Structures, Statistics, Calculus 3
- Selected as a Rabi Scholar, a distinction given annually to the top ~10 incoming freshman STEM majors

WORK EXPERIENCE

Columbia University Medical Center

Student Researcher

Mar. 2020 – Present

New York, NY

- Conduct novel research as the lead contributor on a bioinformatics project centered around the data from cerebellar electroencephalograms of patients with neurological disorders such as Parkinson's Disease and Ataxia
- Analyze patient data by comparing brain waves of diseased patients against healthy individuals using Python-based machine learning and Fourier methods, leading directly to significant publishable results
- Draft a manuscript detailing results of research for submission to a peer-reviewed scientific journal
- Collaborate directly with practicing physicians to obtain feedback, patient data, and brain scans
- Present project progress using self-designed figures to an interdisciplinary team at weekly lab-wide meetings

National Institutes of Health

Summer Research Intern

Jun. 2018–Aug. 2018

Rockville, MD

- Developed a gradient-boosting machine learning model to predict N-glycan occupancy within any given protein structure, a phenomenon critical towards understanding important structures such as the surface of HIV
- Scraped data from previously published research using Perl scripts to automate dataset generation
- Mined online databases for protein structures of interest in assistance of malaria vaccine development

LEADERSHIP EXPERIENCE & ACTIVITIES

Columbia Bach Society

Webmaster, Board Member

Feb. 2020 – Present

New York, NY

- Attended weekly board meetings to reinterpret the direction of the club in light of the COVID-19 pandemic
- Organized social bonding events such as parties and club dinners to improve intraclub relationships
- Designed club website to better align it with the board's vision, improving our communication with the wider community (<https://columbiabachsociety.weebly.com>)

Frontiers of Science

Teaching Assistant

Sept. 2019–Dec. 2019

New York, NY

- Held weekly office hours to help other students in a ~500 student class with lecture concepts and homework

SKILLS & INTERESTS

- **Skills:** Java, Python, Perl, C, and R; Linux, Bash, and Git; research; data analysis; machine learning; Excel
- **Interests:** Hiking; classical music; guitar; Counter-Strike; track & field