

ZACHARY HINE

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Goal

To collaborate with other motivated individuals to create software that will improve people's quality of life in developing countries.

Skills

- Fluent in Command Line, Git, Java, Python, and Matlab;
- Highly proficient in multivariable calculus and linear algebra;
- Competent in Spanish

Experience

Research Assistant *May 2018-Present*

Dr. Jiook Cha (mentor) - Department of Psychiatry/Columbia University Medical Center

Use computational analysis of brain imaging data to improve efficacy of treatment of patients with mental health disorders.

Research Assistant *Feb 2018-July 2018*

Dr. Lev Murokh (mentor) - Department of Physics/Queens College, City University of New York

Conducted computer simulations to explore properties of quantum harmonic oscillators and Rabi oscillations and apply this knowledge to the building of a quantum computer.

Mathematics/Computer Science Research Track Student *Sep 2017-Present*

Dr. Vladimir Shapovalov - Bronx High School of Science

Conduct an original research project aimed at making a scientific breakthrough in A.I.

Collaborate with other students on research projects and competitions.

Team member on Robotics Team *Sep 2017-Present*

Joshua Illany (coach) - Bronx Science High School

Compete in the First Robotics Competition and develop drive code, computer vision, and acceleration mapping in order to improve robot's performance.

Work with the programming and construction teams on strategy and to improve the robot's design.

Tutor for SHSI Dream Program *Feb 2017-June 2017*

Jared Kreiner (Asst. Principal) - P.S. 89, Bronx, NY

Prepared students for specialized high schools entrance exam by mentoring them in mathematics and reading comprehension skills.

Education

Bronx High School of Science

Expected graduation: 2020

2017 Columbia Summer Immersion Program: Computer Science