Manuel Paez

manuel.paez@columbia.edu https://mannypaeza.github.io/ Phone: +1 (610) 427-9843

Education

Columbia University - New York, NY

Sept. 2019 - Expected May 2023

Bachelor of Arts, Computer Science; 3.4 GPA

Courses: Theoretical Neuroscience, Accelerated Physics, Natural Artificial Neural Networks, Intro to Quantum Computing

Phillips Exeter Academy - Exeter, NH

Sept. 2017 - Jun. 2019

 $\label{thm:light} \textbf{High School Diploma; 3.54 GPA; Student Organizations: Robotics Club, Math Club, Physics Club, Puzzle Club}\\$

Courses: Advanced Physics, Quantum Mechanics, Advanced German I, History Research Project

Research Experience

Research Assistant - Dept. of Psychiatry, Columbia, ligaya Labs

Apr. 2022 - Sept. 2022

PI: Kiyohito ligaya; researching the Neural Geometry of Context-Dependent Tasks in the Brain using Neural Networks

Research Intern - Flatiron Institute, Chklovskii Group

Sept. 2022 - Present

PI: Mitya Chklovskii; researching on improving Neuron-Segmentation Algorithms for Connectomics of Wasp Brain

Research Assistant - Dept. of Physics, Columbia, Marka Labs

Oct. 2022 - Present

PI: Szabolcs Márka; researching Quantum Algorithmic-Al implementations for Gravitational-Wave, Blackhole Collisions Search

Extracurricular Activities

Member - Undergraduate Math Society	Sept. 2019 - Present
Member - Theoretical Computer Science x Neuro Reading Group	Sept. 2022 - Present
Member - Theoretical Quantum Computer Science Reading Group	Oct. 2022 - Present
Co-founder - Undergrad, Quantum Computer Science Reading Group	Nov. 2022 - Present

Community Involvement

Scientific Mentorship Institute (Sci-Mi)

May 2022 - Aug. 2022

Tutor and mentor for underprivileged high school students in the areas of Computer Science and Neuroscience

Awards

United States International Young Physicist Tournament (USIYPT) - 1st place	Feb. 2018
United States International Young Physicist Tournament (USIYPT) - 1st place	Jan. 2019
Simon Foundation Global Brain SURF Fellowship	Sept. 2022

Skills and Interests

Computer Languages: Python, Java, C, C++, R, MATLAB

Other Computer Skills: Qiskit, Quantum Tensorflow, Cirg, Keras and Tensorflow

Natural Languages: English (Fluent), German (Fluent), Spanish (Fluent), Korean (intermediate), French (intermediate) Research Interests: Quantum Algorithms and Cryptography, Theoretical Computer Science, Neuro-inspired Al

Hobbies: Solving logic puzzles, engaging with the Arts (Galleries, Symphonies, Piano, etc.), and watching Bayern Munich