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; 3.50 GPA Major; 3.40 GPA Cumulative

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

Phillips Exeter Academy - Exeter, NH   Sept. 2017 - Jun. 2019

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, Iigaya Labs   Apr. 2022 - Sept. 2022

PI: Kiyohito Iigaya; 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 implementations for 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, Cirq, Keras and Tensorflow

Natural Languages: English (Fluent), German (Fluent), Spanish (Fluent), Korean (intermediate), French (intermediate)

Research Interests: Quantum Algorithms, Complexity and Cryptography; Neuro-inspired AI

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