

Giovanny Espitia

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Education

Georgia Institute of Technology, Atlanta, GA

August 2021 – May 2024

Expected: May 2024

GPA: 4.0

- Candidate for Bachelor of Science in Physics
- Candidate for Bachelor of Science in Economics
- Member of the Society of Physics Students and Astronomy

Kennesaw State University, Kennesaw, GA

August 2020–July 2021

GPA: 4.0

- Candidate for Bachelor of Science in Physics

Skills

Programming: Python, C++, HTML, CSS

Software: Anaconda, Pandas, NumPy, SciPy, Qiskit, LaTeX, Microsoft office, Google suite

Concepts: Machine learning, Scientific computing, Deep learning, Object-oriented programming, Data structures, Linear algebra, Multivariable calculus, Discrete mathematics, Analysis, non-Euclidean geometry, Classical Mechanics, Quantum Computing, Information Theory, Material Science, Quantum Mechanics, Sequence labeling, Effective communication, Data Analytics

Language: Spanish (advanced), English (native), German (basic)

Research

Student Researcher, Georgia Institute of Technology

December 2021 - Present

- Member of the Control and Dynamics Group
- Used machine learning to study chaotic systems
- Implemented a reservoir computer to predict the Lorenz system

August 2020-May 2021

Student Researcher, Kennesaw State University

- Studied the fracture behavior of graphene under a high-speed impact to examine its mechanical properties
- Performed computational simulations using the LAMMPS framework
- Completed data analysis with the aid of a high – performance computer using C++
- Conducted thorough literature review and quality scientific writing with LaTeX for publication

Projects

Quantum Computing Articles

December 2020-June 2021

Marietta, GA

- Analyzed scientific and technical data
- Performed literature review of past scientific publications
- Interviewed academic researchers in the area
- Wrote findings and conclusions for publication

Data Analysis Examining China's Economic Growth

August 2020–May 2021

- Organized structured and unstructured data
- Performed data visualization
- Interpreted using computational methods for publication

Awards

- President's list scholar for fall 2020, spring 2021, and summer 2021
- Top 5% of class award for the school year 2020 - 2021
- First – year scholar
- NCUR Researcher