

Jonathan Navarro Rodriguez

Atlanta, GA | jnavarro43@gatech.edu | 939-400-8319 | [Linkedin](#) | Portfolio

EDUCATION

Georgia Institute of Technology
BS in Computer Science (GPA: N/A)

Atlanta, GA
Graduation Date: May 2029

University Gardens High School
(GPA: 4.0)

San Juan, PR
Graduation Date: Jun 2025

- **Clubs:** Math Club, Programming Club, National Honor Society, Engineering Club, Science Bowl Club, School Soccer Team

SKILLS & LANGUAGES

Skills: Python (pandas, numpy, sklearn, tensorflow), Mobile Application Development (Android Studio), Java, Mathematical Background

Languages: Spanish (native) & English (fluent)

EXPERIENCE

Plant the Moon Challenge
Participant

Remote
Oct 2024 – May 2025

- Conducted research on lunar regolith to identify crucial nutrient availability, extraction strategies and optimal plant selection. Applied ANOVA to compare soil groups, confirming significant differences among them.
- Engineered and tested soil amendment strategies using spinach seed growth experiments. Earned Innovation Award for extracting ferromagnetic particles from regolith, achieving strongest growth in 3:1 blend with soil.

MIT FutureMakers Participant - SureStart & MIT RAISE Initiative
Track 2 Participant (Mobile App Development)

Remote
Jun 2024 – Aug 2024

- Designed and programmed waste management mobile app using MIT App Inventor, enhanced with Personal Image Classifier AI to automatically differ recyclables from trash via camera input.
- Applied UI/UX design principles to develop an intuitive UI for community-driven waste disposal efforts, an updated map indicating disposal locations, pick-up reminders, and preventative measures for natural disasters.
- Gained experience in entrepreneurship, public speaking, stakeholder analysis, and AI applications for startups

Challenge Mars Water (Reto Marte) Competition
Participant

Bayamón, PR
Apr 2024 – May 2024

- Researched Martian survival challenges, including oxygen production, CO₂ extraction, and habitat construction. Evaluated current technologies to identify opportunities for water generation systems.
- Synthesized data to propose hypothetical space mission solutions to judges, highlighting Earth impact and water generation via merging hydrogen (Sabatier reaction) and oxygen (CO₂ electrolysis with NASA's MOXIE).

Puerto Rico Math Olympiad Summer Camp
Participant

Mayagüez, PR
Jun 2023 – Jun 2023

- Engaged in advanced seminars covering Olympiad-level topics including number theory and proof writing
- Competed in rigorous mock Olympiads, refining math problem-solving and analytical reasoning.

Consortium of Hybrid Resilient Energy Systems (CHRES)
Participant

Gurabo, PR
Jun 2022 – Jul 2022

- Researched the impact of tire degradation on microplastic pollution in urban environments.
- Developed a theoretical plan for hybrid energy solutions that repurposed waste tires, aiming to reduce pollution.

LEADERSHIP EXPERIENCE

Mathematics Competition Club
President

San Juan, PR
Aug 2022– Present

- Led and oversaw weekly meetings, competitions, and socializing sessions to engage members in mathematics.
- Created review workshops for seniors to improve their problem-solving skills and mathematical intuition standardized testing like the College Board. Increased club membership by 200%.

PROJECTS

- **Precipitation Prediction with One Dimensional Convolutional Neural Network.** Built and trained a CNN using rainfall station data to predict rain volume in Puerto Rico, optimizing preprocessing, architecture, and evaluation to improve forecast accuracy to support early flash floods warnings and disaster preparedness.

AWARDS & HONORS:

Questbridge Finalist

Oct 2024

- National scholarship finalist in highly competitive program for academic excellence, leadership, and resilience.

Puerto Rico Math Olympiad Pre-team

Jun 2023

- Top 10 students preselected as Puerto Rico's Math Olympiad Team.

Department of Education of Puerto Rico Math Olympiad

May 2022, 2023, 2024, 2025

- 1st, 3rd, 2nd, and 3rd in Puerto Rico Public Schools Math Competition respectively.