

Micky D. Santiago-Zayas

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Website: mdsantia.github.io/ | **GitHub:** github.com/mdsantia/ | **LinkedIn:** Micky Santiago-Zayas

Academic Background

Iowa State University; Ames, Iowa

Post-Baccalaureate in Mathematics

Aug 2024 – Current

GPA TBD

Purdue University; West Lafayette, Indiana

BS in Mathematics and Computer Science

July 2020 – May 2024

3.59 GPA

Polytechnic University of Puerto Rico; San Juan, Puerto Rico

High School Dual-Enrollment

Nov 2018 – Oct 2019

3.73 GPA

Work

Pre-Calculus–Graduate Teaching Assistant

Aug 2024 – Current

Iowa State University, MATH 1430

- ∂ Teach multiple sections of weekly recitations with quizzes.
- ∂ Grading and office hours are also part of the weekly responsibilities.

Differential Equations–Teaching Assistant

Aug 2022 – May 2024

Purdue University, MA 366

- ∂ Teach weekly sections for problem solving techniques with DEQs software.
- ∂ Discussing potential solutions that allow the students to think critically.
- ∂ Solving a wide range of applicable problems of estimation in the real world.
- ∂ Grading weekly Labs.

Emerging Leaders Science Scholar Mentor

Aug 2021 – May 2022

Purdue University

- ∂ Lead three incredible minority freshmen in Mathematical fields to adapt to college life.
- ∂ Hold weekly meetings to ensure their mental and academic well-being.

Intro to Research–Grading Assistant

July 2021 – Aug 2021

Purdue University, HONR 299

- ∂ Responsible for weekly office hours and grading weekly evaluations during the summer course of incoming freshmen.

Research Experience

Alternative Artificial Intelligence

June 2023 – Aug 2023

Institute of Pure and Applied Mathematics (IPAM)

- ∂ Team project in the Research of Industrial Projects for Students (RIPS).
- ∂ Worked on an alternative artificial intelligence framework through particle methods.
- ∂ Trained neural networks that could recreate the behavior of our alternative algorithm.
- ∂ These methods were also run in Nvidia's Omniverse for Digital Twin machine learning.
- ∂ RIPS Projects Day presentation sharing the main achievements of the project.

June 2022 – Sep 2022

Random Walks of Almost Leinert Sets

Purdue University

- ∂ Weekly research group presentations.
- ∂ We expanded and estimated random walk studies on semi-commutable spaces.
- ∂ Built probability bound functions that accounted for the new possible walks from commutative spaces.
- ∂ MATLAB code and algebraic analysis to corroborate our hypotheses.
- ∂ Multiple presentations in LSAMP 2022 Summer Conference, Purdue 2022 Undergraduate Conference, and Math Undergrad Presentation Night 2023.

Membership, Scholarships and Awards

Math Alliance

Aug 2023 – Current

Purdue's Honors College

July 2020 – May 2024

Emerging Leaders College of Science Scholarship

Aug 2020 – May 2024

Kinesis Scholars Scholarship

Aug 2020 – May 2024

Summer Stay Scholarship

May 2021 – Aug 2021

LSAMP Researcher

June 2022 – Aug 2022

BoilerMake Hackathon Participant

Jan 2022