Micky D. Santiago-Zayas

mdsantia@iastate.edu

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

Academic Background

Iowa State University; Ames, Iowa   **Aug 2024 – Current**
Post-Baccalaureate in Mathematics   *GPA TBD*
Purdue University; West Lafayette, Indiana   **July 2020 – May 2024**
BS in Mathematics and Computer Science   *3.59 GPA*
Polytechnic University of Puerto Rico; San Juan, Puerto Rico   **Nov 2018 – Oct 2019**
High School Dual-Enrollment   *3.67 GPA*

Work

Pre-Calculus–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.

Random Walks of Almost Leinert Sets   **June 2022 – Sep 2022**
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.

Scholarships and Awards

Purdue's Dean's List   *July 2020 – May 2024*
Purdue Semester Honors   *July 2020 – May 2024*
***Emerging Leaders College of Science* Scholarship**   *July 2020 – May 2024*
***Kinesis Scholars* Scholarship**   *July 2020 – May 2024*
BoilerMake Hackathon Participant   *Jan 2022*