

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 <i>Post-Baccalaureate in Mathematics</i>	Aug 2024 – Current <i>GPA TBD</i>
Purdue University; West Lafayette, Indiana <i>BS in Mathematics and Computer Science</i>	July 2020 – May 2024 <i>3.59 GPA</i>
Polytechnic University of Puerto Rico; San Juan, Puerto Rico <i>High School Dual-Enrollment</i>	Nov 2018 – Oct 2019 <i>3.73 GPA</i>

Work

Pre-Calculus–Graduate Teaching Assistant <i>Iowa State University, MATH 1430</i> <ul style="list-style-type: none">∂ Teach multiple sections of weekly recitations with quizzes.∂ Grading and office hours are also part of the weekly responsibilities.	Aug 2024 – Current
Differential Equations–Teaching Assistant <i>Purdue University, MA 366</i> <ul style="list-style-type: none">∂ 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.	Aug 2022 – May 2024
Emerging Leaders Science Scholar Mentor <i>Purdue University</i> <ul style="list-style-type: none">∂ Lead three incredible minority freshmen in Mathematical fields to adapt to college life.∂ Hold weekly meetings to ensure their mental and academic well-being.	Aug 2021 – May 2022
Intro to Research–Grading Assistant <i>Purdue University, HONR 299</i> <ul style="list-style-type: none">∂ Responsible for weekly office hours and grading weekly evaluations during the summer course of incoming freshmen.	July 2021 – Aug 2021

Research Experience

Alternative Artificial Intelligence <i>Institute of Pure and Applied Mathematics (IPAM)</i> <ul style="list-style-type: none">∂ 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 2023 – Aug 2023
Random Walks of Almost Leinert Sets <i>Purdue University</i> <ul style="list-style-type: none">∂ 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.	June 2022 – Sep 2022

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