Samanta Rodriguez

Email Homepage Google Scholar

EDUCATION

University of Michigan, Ann Arbor, MI, United States
PhD Candidate in Robotics Department (*Advisor: Nima Fazeli*)   Sep 2021 - Dec 2025

University of Michigan, Ann Arbor, MI, United States
Master of Science at Robotics, *(GPA: 4.0/4.0)*   Sep 2021 – May 2024

Florida International University, FL, United States
Bachelor of Science at Mechanical Engineering *(Summa Cum Laude)*   Sep 2016 – May 2020

PUBLICATIONS

1. **Samanta Rodriguez***, Yiming Dou*, Miquel Oller, Kevin So, Andrew Owens, Nima Fazeli, "*Cross-Sensor Touch Generation*," Conference on Robot Learning (CoRL), 2025 (Oral presentation).

2. **Samanta Rodriguez***, Yiming Dou*, William van den Bogert, Miquel Oller, Kevin So, Andrew Owens, Nima Fazeli, "*Contrastive Touch-to-Touch Pretraining*," International Conference on Robotics and Automation (ICRA), 2025.

3. Shun Li, **Samanta Rodriguez**, Yiming Dou, Andrew Owens, Nima Fazeli, "*Tactile Functasets: Neural Implicit Representations of Tactile Datasets*," International Conference on Robotics and Automation (ICRA), 2025.

4. Satya R. T. Peddada, **Samanta B. Rodriguez**, Kai A. James, James T. Allison, "*Automated Layout Generation Methods for 2D Spatial Packing*," ASME International Design Engineering Technical Conferences (IDETC), 2020.

INTERNSHIPS

Manipulation and Machine Intelligence Lab, MI, United States   Sep 2021 – May 2025
Graduate Researcher (Fellowship-Funded)
Advisors: Nima Fazeli

Oak Ridge National Laboratory, Manufacturing Division, TN, United States   Jun 2021 – Aug 2021
Intern
Advisors: Peter Wang

Applied Research Center, Florida International University, FL, United States   Sep 2019 – Jul 2020
Undergraduate Researcher

Advisors: Anthony Abrahao

POETS Research Center, University of Illinois, IL, United States   May 2019 – Aug 2019
Undergraduate Researcher, Summer Research Internship
Advisors: James Allison

REVIEWING

• Primary Reviewer: ICRA (2024, 2025), CoRL (2025), RA-L (2025)

MENTORING

• Chitrangada Devulapalli (U of M, 2025) – Master's student in Robotics at the University of Michigan
• Kevin So (U of M, 2023) – Master's student in Robotics at the University of Michigan
• Dereck Fermin Oliveras (U of M, 2022) – Master's student in Robotics at the University of Michigan

LEADERSHIP & SERVICE

• Officer of Robotics Graduate Student Council (RGSC)   2022 – 2024
• DEI/RCE member of Robotic Department Committee   2022 – 2024

AWARDS & SCHOLARSHIPS

• NSF Graduate Research Fellowship   2021 – 2026
• Consortium for Graduate Degrees for Minorities in Engineering and Science (GEM) Fellowship   2021 – 2026
• Rackham Presidential Graduate Fellowship   2022
• Outstanding Graduate Student in Mechanical Engineering, FIU   2020
• Winner – 2020 International Atomic Energy Agency challenge   2020
• NSF Fellowship for Summer Undergraduate Research Program - POETS Research Center   2019

SKILLS

• Hardware: KUKA LBR iiwa Med R820, Digit, GelSlim, GelSight, TRI Soft Bubble, Intel-Realsense, ATI F/T sensor
• Programming Language : Python, Matlab
• Language : Spanish (native), English (fluent)