# Antonio Cassio De Oliveira Segura

Miami, FL 33156 | 305-363-9473 | antoniodeoliveirasegura@gmail.com

#### **EDUCATION**

Purdue University, College of Engineering Bachelor of Science, Computer Engineering

Indianapolis, IN Class of 2028

#### PROFESSIONAL EXPERIENCE

## Goldman Sachs 2025 Possibilities Summit

Virtual

January 2025 – Present

- Student
  - Selected as 1 of 3,000 from 14,000+ applicants for Goldman Sachs' Engineering Possibilities Summit.
  - Completed a finance job simulation, applying financial modeling, reporting, and Net Asset Valuation (NAV).
    Networked with professionals, gaining insights into fintech, engineering, and financial technology applications.

## **Purdue University – FTR Program (First Time Researcher)**

Indianapolis, IN

Undergraduate Researcher

August 2024 – Present

- Conducting research on PEDOT: PSS-MXene Bioelectrodes to improve long-term stability and electrical conductivity for neural interfaces.
- Assisted in fabrication and characterization of materials using cyclic voltammetry (CV), electrochemical impedance spectroscopy (EIS), and pulse waveform analysis
- Collaborating with faculty and peers on a research paper, scheduled for publication in May/June 2025.

## Vertically Integrated Projects (VIPS) – Allegion

Indianapolis, IN

Undergraduate Researcher

August 2024 – Present

- Researched energy harvesting technologies such as solar, thermal, and RF for integration into IoT security systems to extend battery life.
- Collaborated cross-functionally to develop robust, repeatable solutions, considering environmental factors and usage profiles.
- Programmed embedded systems and IoT to evaluate energy storage and boost performance.

#### The Data Mine (TDM)

West Lafayette, IN

### Undergraduate Data Science Researcher

August 2024 – Present

- Learned Seminar-R and Python for data analysis and visualization.
- Conducted trend analysis on large datasets to uncover patterns and insights.
- Developed and optimized data pipelines for efficient data processing and reporting.

## **University of Michigan – Mission Sunrise**

Miami, FL

Researcher

**December 2023 - May 2024** 

- Constructed an antenna from materials to detect and record solar radio frequencies.
- Led the monitoring and analysis of frequency data for anomalies, ensured accuracy in data collection, and uploaded findings to the University of Michigan for further analysis.
- Took responsibility for weekly data collection, 6 hours per week, supporting scientific efforts in collaboration with NASA.

#### **Raytheon Technologies**

Virtual

Student Internship

**June 2022 – July 2022** 

- Accepted as one of 160 students for a program, receiving lectures from experts in Aerospace, Cybersecurity, and design.
- Partnered with experts on insights into enhanced industry practices.
- Led, designed, and devised an automated breakfast maker to enhance everyday efficiency and convenience.

#### RELEVANT SKILLS

- Programming: Python, Seminar-R, C/C++, Embedded Systems.
- Hardware & Tools: PCB Design, MATLAB, AutoCAD, Fusion 360, Onshape (Certified).
- Languages: Fluent in Portuguese & English.