PEDRO G. LEITE

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EDUCATION

Master of Science in Aerospace Engineering Cumulative GPA: x.xx/4.00
University of Illinois Urbana-Champaign, Champaign, IL Expected May 2024

Bachelor of Science in Aerospace Engineering Cumulative GPA: 3.33/4.00
University of Illinois Urbana-Champaign, Champaign, IL May 2023

Relevant Coursework:

Control Systems Theory	Aerospace Control Systems	Autonomous Systems Lab	Numerical Methods
Multi-Agent Systems Control	Aircraft Flight Mechanics	Aerospace Systems Design	Orbital Mechanics

PROJECTS

Control Systems (Class) January 2023 – May 2023
- Designed and implemented a controller and observer to stabilize a reaction wheel inverted pendulum.

Communications Subsystem Lead January 2023 – May 2023
MARS Surveyor and Communications Orbiters for Positioning and Exploration Satellite
- Sized antennas and electrical components of both space and ground radio for a Mars satellite mission to provide GPS, communication relay, and mineral mapping of the planet's surface.
- Presented the preliminary design review and won the class competition at the end of the semester.

TVC System Lead and Programmer January 2022 – May 2023
AIAA – Liquid Rocket Initiative
- Organized timeline for timely design and manufacturing of liquid-bipropellant rocket test stand.
- Applied Object Oriented Programming in Python to develop a script that is used to size thrust chamber assemblies.

Aerospace Control Systems (Class) April 2022 – May 2022
- Implemented an observer-based linear state feedback control design to stabilize a 4-rotor drone through a hoop circuit as quickly as possible, achieved 1st place in the class competition, performing 50% faster than the 2nd place.

PROFESSIONAL EXPERIENCE

Teaching Assistant August 2023 – Present
Autonomous Systems Lab *Champaign, IL*
- Guided a lab section of 18 students, assisting them in the system identification, design, and implementation of a controller and observer system to stabilize a Crazyflie 2.1 quadrotor drone.
- Held office hours to assist a class of over 140 students in debugging software issues as well as conceptual questions.

Team's Monitor Evaluator/Data Analysis Group Intern June 2020 –August 2020
Azul Airlines *São Paulo, Brazil*
- Analyzed and manipulated an Excel spreadsheet together with 5 team members to identify unsatisfactory sales.
- Formulated a data identification algorithm that was put in use by the company.

LEADERSHIP

- Engineering Council Dean's Student Advisory Committee Member May 2022 – May 2023
- Alpha Delta Phi Interfraternity Council Chair/Re-founder January 2022 – May 2023
- Engineering Council Awards Chair May 2020 – May 2021

SKILLS

- Software: Python, MATLAB, LaTeX, GitHub, Siemens NX, Microsoft Suite
- Spoken Languages: Portuguese (Native), English (Fluent), Spanish (Fluent)