

Leonardo Mouta

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EDUCATION

Carnegie Mellon University <i>Master of Science in Robotic Systems Development</i>	Pittsburgh, PA May 2025
ISAE-SUPAERO <i>Master of Science in Engineering - Aerospace</i>	Toulouse, France Dec 2022
Aeronautics Institute of Technology (ITA) <i>Bachelor of Science in Aerospace Engineering Minor Degree in Engineering Physics</i>	Sao Jose dos Campos, Brazil Dec 2022

EXPERIENCE

JPMorgan Chase & Co. AI Maker Space <i>Technical Assistant</i>	Pittsburgh, PA Sep 2023 - Present
<ul style="list-style-type: none">Supervised graduate and undergraduate students who were using the AI Maker Space, assisting them in operating various kinds of robots. Also responsible for setting up, operating and maintaining the space's drones and robotic arms.	
Colegio Olimpo (Middle and High School) <i>Physics Teacher</i>	Brasilia, Brazil Feb 2023 - Aug 2023
<ul style="list-style-type: none">Taught physics to the senior high school class that was focused on the admission exams for the Aeronautics Institute of Technology and the Military Institute of Engineering, the top engineering universities in Brazil.	
Laboratory for Analysis and Architecture of Systems (LAAS-CNRS) <i>Research Intern</i>	Toulouse, France Apr 2022 - Sep 2022
<ul style="list-style-type: none">Implemented novel contact-based RRT planning algorithms for swarms of drones carrying a slung load, resulting in a 73% success rate for the scenarios tested.	
BOCOM BBM Credit Bank <i>Quant Trading/Macroeconomics Summer Intern</i>	Rio de Janeiro, Brazil Jan 2019 - Mar 2019
<ul style="list-style-type: none">Developed a python package for quantitative trading that enabled the bank to convert bonds tied to different indexes, thus solving a longtime need.	
Aeronautics Institute of Technology (ITA) <i>Teaching Assistant</i>	Sao Jose dos Campos, Brazil Jul 2018 - Jul 2020
Reserve Officer Training Corps - Brazilian Air Force <i>Officer Candidate</i>	Sao Jose dos Campos, Brazil Jan 2017 - Nov 2017

TECHNICAL PROJECTS

Koppers Inc. <i>Capstone Project</i>	Pittsburgh, PA Sep 2023 - Present
<ul style="list-style-type: none">Assembled a team that is developing a robot to clean chemical waste in Koppers' factories, enabling them to increase production output, protect workers' health and meet client demands more efficiently.	
Dassault Aviation/ISAE-SUPAERO <i>Joint Research Project Member</i>	Toulouse, France Aug 2021 - Mar 2022
<ul style="list-style-type: none">Was part of a team of students who devised metrics on how to best assess flight dynamic quality for multirotor UAVs under various sensor loads, which are to be used by Dassault Aviation for automated plane maintenance.	
Department of Complex Systems Engineering - ISAE-SUPAERO <i>Student Researcher</i>	Toulouse, France Mar 2021 - Jun 2021
<ul style="list-style-type: none">Wrote python programs for testing novel ACAS X technologies in order to determine horizontal resolutions for quadcopters in colliding paths, resulting in over 99% success rate in simulations.	

SKILLS SUMMARY

Programming: Python, C/C++, ROS, Arduino, Matlab/Simulink, Java, Mathematica, R
Tools/Skills: Linux, Windows, Gazebo, PX4 Autopilot, Docker, Git/Github, MS Office, SOLIDWORKS

CERTIFICATIONS

Certified SOLIDWORKS Associate (CSWA) in Mechanical Design <i>Issued by Dassault Systemes</i>	Jul 2023
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HONORS AND AWARDS

CAPES-Brafitec Scholarship: Government scholarship awarded to exceptional Brazilian students who were chosen to pursue double degree programs in France.
Bahia Asset Management Scholarship: Grade-based stipend awarded to selected students at prestigious Brazilian universities who were chosen as teaching assistants.
Exemplary Student Award - Reserve Officer's Training Corps: Chosen by the instructor staff as exemplary student for my ROTC class year.