

Jose Filipe Pedroso Botas

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EDUCATION

University of Michigan

Ann Arbor, MI

Bachelor of Science in Aerospace Engineering

May 2026

Minor in Computer Science

Coursework: Data Structures and Algorithms, Introduction to Machine Learning, Fundamentals of Product Development, Aerospace Tools and Methods MBSE, Aerodynamics, Aerospace Structures, Control of Aerospace Vehicles, Aerospace Propulsion, Aerospace System Design, Introduction to Materials and Manufacturing, Composite Materials

WORK EXPERIENCE

AES - Angola Environmental Serviços

Luanda, Angola

Environmental Engineer Intern - Oil & Gas Waste Management Operations, IT & Planning

May 2025 - June 2025

- Collaborated with operators in running a high-temperature incinerator and thermal desorption unit, contributing to pressure-system diagnostics and hands-on maintenance procedures during treatment of 670 metric tons of oil waste
- Coordinated digitalization of hazardous waste reception and reporting systems, guiding app development and aligning data requirements across departments to enable tracking, cut paper use by 90%, and manual entry hours by 50%

JRBOTAS - Market Leader in Luxury Bathroom Supply

Lisbon, Portugal

Strategy Consulting Intern

May 2023 - August 2023

- Conducted competitive analysis across 50+ products using internal performance metrics and market data to prioritize product lines for sales outreach, resulting in a 10% increase in total sales, and 30% increase in leads in 6 months
- Boosted sales of seven underperforming new product lines by 40% after identifying them through internal data and introducing a new catalog structure with tiered product placement to highlight value and increase B2B visibility
- Rebuilt jrbotas.com to restore catalog access post-failure, increasing brand exposure and streamlining product updates

PROJECT EXPERIENCE

Collins Aerospace & Bioastronautics and Life Support Systems (BLiSS) Student Team

Ann Arbor, MI

Mechanical Systems Engineer & XR coordinator

August 2023 - May 2024

- Designed, tested, and delivered an algae-based CO₂ scrubber prototype for Collins Aerospace within the MBSE design cycle, collaborating with a 14-member student team and coordinating with Collins, RTX, and NASA through PDR, SRR, CDR, and FRR reviews to integrate stakeholder feedback and achieve 12–26% of theoretical efficiency
- Evaluated VR integration through four Siemens NX CAD trials, documenting both improvements in spatial understanding and collaboration and key editing-tool limitations in a technical memorandum for Collins Aerospace
- Redesigned the CO₂ inlet interface to evenly split flow to four spargers with integrated conical diffusers, iteratively optimizing geometry in ANSYS CFD at 30 L/min and reducing backflow by 40% while improving flow distribution

CLUB EXPERIENCE

Michigan Blockchain

Ann Arbor, MI

Investments Team Senior Member

January 2025 - Present

- Managed a 40 ETH (~\$158K) crypto fund; led the GEODNET investment thesis (cm-level RTK GNSS network), performing on-chain and fundamental analysis to secure unanimous team approval for a strategic 18% allocation
- Led development and rollout of onboarding curriculum and training materials for incoming Investments Team cohort

SKILLS

Languages: Native Portuguese, Native English, Intermediate French, Beginner Spanish, Beginner Russian

Technical: CAD, CFD, Siemens NX, STAR-CCM+, Ansys Discovery & SpaceClaim, Adobe Suite, Office Suite

Programming: C++, C, Python, Matlab, Simulink, HTML, CSS

ACTIVITIES

Michigan International Student Society, Delta Chi Fraternity, Brazilian Student Association

August 2022 – Present

ADDITIONAL:

Skied for over 8 years, in 5 countries; My top 2 resorts were Les 3 Vallées, and Snowbird; Dream to ski Japanese powder
Advanced Openwater PADI Scuba Diving license (level 2); My best dive was in the Maldives, love diving with sharks
Volleyball National Champion – Portugal (U17), 2021–2022. Opposite hitter for CVO club