



Igor Lucindo Cardoso

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PROFESSIONAL SUMMARY

- Research focus on optimization, Mixed-Integer Programming (MIP), and graph theory.
- Hands-on experience in mathematical modeling, machine learning, and robotics.
- Published work presented at IEEE conferences.
- Strong foundation in electronic engineering and programming (C/C++, Python, Matlab, Julia).
- Active contributor to professional and research communities.

EDUCATION

Texas Tech University (TTU) Ph.D. in Industrial Engineering Research: Optimization, MIP, Graph Theory	2025 – Present GPA: 4.0/4.0
Getulio Vargas Foundation (FGV) M.A. Courses in Mathematical Modeling	2023 – 2024
Military Institute of Engineering (IME) B.S. in Electronic Engineering	2020 – 2024 GPA: 8.29/10

RESEARCH EXPERIENCE

Research Assistant, Texas Tech University (TTU)	2025 – Present
<ul style="list-style-type: none">• Conducting research in optimization, MIP, and graph theory, with ongoing work targeted for publication in leading optimization journals.• Advisor: Dr. Hamidreza Validi.	
Research Experience for Undergraduates, Memorial University of Newfoundland (MUN)	2023
<ul style="list-style-type: none">• Contributed to machine learning, computer vision, and robotics in the BioInspired Robotics Lab. Developed a prosthetic hand with autonomous grasping. (Publication: Comparing Pre-Trained Object Detection Models for Autonomous Grasp, <i>IEEE MeMeA</i> 2024)• Advisor: Dr. Vinicius P. da Fonseca.	

HONORS & AWARDS

• 1st place in "The Road to 2050" competition, Shell Eco-marathon Team	2021
• 5th place in Petrobras Challenge, Latin American Robotics Competition, RoboIME	2021
• Gold and Silver Medals, Brazilian Mathematical Olympiad of Public Schools (OBMEP)	2018 – 2019

PROFESSIONAL AFFILIATIONS & ACTIVITIES

INFORMS Student Chapter, TTU	2025 – Present
<ul style="list-style-type: none">• Active member engaging in seminars, discussions, and collaborative research in optimization and operations research.	
Robotics Club – RoboIME	2021 – 2023
<ul style="list-style-type: none">• Worked on projects involving machine learning and computer vision.	
Shell Eco-marathon Team	2021 – 2023
<ul style="list-style-type: none">• Team member developing sustainable engineering solutions.	

SKILLS

Programming	Python, C/C++, Matlab, Julia, JavaScript, HTML, CSS, FPGA
Tools	Gurobi, Cuda, Git, L ^A T _E X, ROS, Arduino, Cloud Firestore
Languages	Portuguese (native), English (fluent), French (intermediate)