E-mail: jpgcamargo@outlook.com **Address:** 301 Edge Way, Blacksburg, VA

João Pedro Camargo



EDUCATION

Virginia Polytechnic Institute and State University

Bachelor of Science, Mechanical Engineering - GPA: 3.96

Minor, Green Engineering

Expected May 2027

Blacksburg, VA

RELEVANT EXPERIENCE

The L.S. Starrett Company

Mechanical and Processes Engineering Intern

August 2024 - Present Athol, MA - Mt Airy, NC

- Analyzed manufacturing operations with Oracle and Noetix, identifying outsourcing opportunities that reduced labor, rework, and process inefficiencies.
- Developed a business case to replace chemical etching with a femtosecond laser, presenting ROI, environmental, and reliability analysis that projected \$1M+ in annual savings.
- Co-led technical investment proposals to senior leadership and the private equity board, aligning technical results with strategic decision-making.
- Authored SOPs and led cross-functional training on automated vision inspection systems, ensuring consistent adoption across teams.

The L.S Starrett Company

Mechanical Engineering Intern

May 2024 - August 2024

Athol, MA

- Conducted root-cause analysis of product failures, translating technical findings into corrective action recommendations.
- Designed and prototyped fixtures, nozzles, and robotic grippers to improve test automation and workflow efficiency.
- Enhanced operator safety by implementing pneumatic and dual-control systems on mechanical presses in alignment with OSHA standards.

SEAD Lab — Virginia Tech

Undergraduate Researcher

September 2025 - Present

Blacksburg, VA

- Researching probabilistic machine learning methods to quantify measurement uncertainty and its impact on operational decision-making.
- Created synthetic datasets in Python (NumPy, Pandas, scikit-learn) to model inspection noise and bias, enabling analysis of false reject/accept rates.
- Developing cost models to evaluate decision policies and reduce scrap/rework costs, bridging statistical analysis with business implications.

ORGANIZATIONS & LEADERSHIP

Tau Beta PI - Engineering Honor Society

Member at Virginia Beta Chapter at Virginia Tech

December 2024

Junior Tennis Player & Assistant Coach

February 2019 - Present

Former international junior tennis athlete; trained six days a week and competed in elite global tournaments including Les Petits As (Paris); coached youth players; representing Virginia Tech on the Tennis Club team.

SKILLS

Languages: Portuguese (Native), English (Bilingual), Spanish (Full Professional)

Software & Tools: Solid Works, PreForm, Microsoft 365, Oracle ERP, Noetix, Keyence Vision Systems

Manufacturing & CAD: CNC Vision Programming, Mechanical Drafting, Process Troubleshooting, SOP

Development, Turning, Lathes, Presses, Casting, Tempering, Welding

Programming Languages: C++, MATLAB, Python