



## EDUCATION

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- **University of São Paulo, São Carlos (ICMC - USP)** 2023 - Present  
*B.Sc. in Computer Science*
- **ETEC Martin Luther King (CPS)** 2020 - 2021  
*Technical Course in System Development*

## EXPERIENCE

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- **Research Intern in Quadrupedal Robotics** 2025 - Present  
*University of Illinois Urbana-Champaign (UIUC)* Urbana-Champaign, US  
–**Advisor: Prof. Girish Chowdhary** | Developed high-fidelity simulations and Reinforcement Learning control policies with Mixture of Experts (MoE) for quadrupedal loco-manipulation and robust autonomous navigation in complex terrains.
- **Undergraduate Researcher in Mobile Robotics** 2025 - Present  
*Mobile Robotics Laboratory (LabRoM) - USP* São Carlos, BR  
–**Advisor: Prof. Marcelo Becker** | Conducted a FAPESP-funded scientific initiation project focused on developing methods for the autonomous adaptation of quadruped robot locomotion in diverse scenarios.
- **Programming Manager in Autonomous Mobile Robotics** 2023 - 2025  
*SEMEAR Group - USP* São Carlos, BR  
–Managed the technical team and project execution, leading the group to win 1st place nationally in *RoboCup@Work* by developing autonomous navigation, perception, and manipulation systems for industrial environments.
- **Undergraduate Researcher in Applied Computer Vision** 2024  
*GIVA Laboratory - USP* São Carlos, BR  
–**Advisor: Prof. Joao E.S. Batista Neto** | Executed a FAPESP-funded scientific initiation project applying machine learning methods for curvature estimation in 3D meshes as an alternative to traditional geometric approaches.

## SKILLS

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**Languages:** Portuguese (Fluent), English (Advanced), Spanish (Basic)

**Developer Tools:** Amazon Web Services (AWS), GitHub, Git, Docker, SLURM

**Frameworks:** Robot Operating System (ROS 1 and 2), PyTorch, IsaacSim/IsaacLab, CUDA

**Soft Skills:** SCRUM, People Management, Teamwork

**Areas of Interest:** Robotics, Autonomous Systems, Advanced Robotic Control, Mobile Manipulation, Deep Reinforcement Learning, Multi-Task Reinforcement Learning

## PROJECTS

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- **Adaptive Quadruped Locomotion via Deep RL** (FAPESP Researcher) 2025  
–Developed terrain-specialized RL expert policies using representation learning, improving system performance over baseline methods (Accepted at ICAR 2025).
- **3D Mesh Curvature Estimation using ML** (FAPESP Researcher) 2024  
–Built predictive models to rapidly estimate mean and Gaussian curvatures in 3D meshes, presenting findings at the SIICUSP symposium.

## PUBLICATIONS

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- **IEEE 22nd International Conference on Advanced Robotics (ICAR)** Conference Article 2025  
–**Angarola\***, M. P., Affonso\*, F., & Becker, M. (2025). Learning Terrain-Specialized Policies for Adaptive Locomotion in Challenging Environments. 22nd International Conference on Advanced Robotics (ICAR). IEEE, 2025.

## AWARDS AND RECOGNITIONS

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- **RoboCup@Work International 2025** - Salvador, Brazil 2025
  - Participated in the *RoboCup 2025 World Championship* in Salvador, Brazil, competing among leading international robotics teams.
- **Brazilian Robotics Competition (CBR)** - Goiânia, Brazil 2024
  - First place in the *RoboCup@Work* category of the 2024 Brazilian Robotics Competition.