Massimiliano Iaschi

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EDUCATION

Georgia Institute of Technology, Atlanta, GA *Expected Graduation Summer 2025*
Bachelor of Science in Mechanical Engineering GPA: 3.97 / 4.00, Major GPA: 4.00 / 4.00
Minors: Robotics, Biology
Experiential Learning Scholarship Recipient

Liceo Scientifico Statale Stanislao Cannizzaro, Rome, Italy *July 2021*
Diploma di Esame di Stato (Scientific) Highest Honors

RELEVANT EXPERIENCE

CRAB Lab, Bio-Inspired Robotics Undergraduate Researcher, Georgia Tech, Atlanta, USA Aug 2023 – Present
• Conducting long-term research under Prof. Daniel Goldman and mentors Baxi Chong and Juntao He.
• Main project: leveraging mechanical intelligence to enhance multilegged robot performance in complex environments.
• Focus on biologically-inspired design, control systems design, physics-based modeling, and SLAM integration.

Autonomous Systems Lab, Summer Robotics Research Intern, ETH Zurich, Zurich, Switzerland May – Aug 2023
• Worked for Tethys Robotics, a spin-off led by Prof. Roland Siegwart students, developing autonomous underwater vehicles (AUVs) for exploration and rescue missions.
• Designed traditional and soft robotic components for the next-generation AUV platform. Performed simulation-based design validation including CFD and stress analysis.
• Developed Python algorithms for real-time pose and current estimation to support robust navigation and motion planning.
• Worked while concurrently completing Georgia Tech coursework and participating in ETH's ROS Masters course

PoWeR Lab, Bio-mechatronics Undergraduate Researcher, Georgia Tech, Atlanta, USA Jan 2022 – Apr 2023
• Worked under Prof. Gregory Sawicki on robotic prostheses and exoskeletons for improved human locomotion.
• Designed a Simulink-based PID control system for the Stanford-developed Bump'Em platform, to study human balance and gait under Amro Alshareef's mentorship.
• Contributed to CAD modeling and prototyping across various projects.

Siena Robotics and Systems Lab, Summer Robotics Research Intern, University of Siena, Siena, Italy Jun – Jul 2022
• Researched haptic wearable robotics under Prof. Domenico Prattichizzo, focusing on thermally induced tactile illusions via Peltier elements.
• Built custom hardware and implemented a LabVIEW-based closed-loop control system necessary for conducting haptics experiments.

• Engaged in research activities while enrolled in Georgia Tech summer courses.

HyperJackets Club at Georgia Tech, Vehicle Dynamics Team Member, Georgia Tech, Atlanta, USA Aug 2021 – Aug 2022
• Designed braking system components as part of Georgia Tech's hyperloop team.

PUBLICATIONS

1. **Iaschi, M.**, Chong, B., Wang, T., Lin, J., He, J. *Addition of a Peristaltic Wave Improves Multi-Legged Locomotion Performance on Complex Terrains.* Proceedings of ICRA, 2025.
2. He, J., Chong, B., **Iaschi, M.**, Nienhusser, V., Goldman, D. I. *Tactile Sensing Enables Vertical Obstacle Negotiation for Elongate Many-Legged Robots.* RSS, 2025.
3. Teder, E., Chong, B., He, J., Wang, T., **Iaschi, M.**, Soto, D., Goldman, D. I. *Effective Self-Righting Strategies for Elongate Multi-Legged Robots.* ICRA, 2025.
4. Soto, D., Erickson, E., Pierce, C., Diaz, K., **Iaschi, M.**, Lee, A., Goldman, D. I. *Legged Locomotion in Lattices: Centipede Traversal of Obstacle-Rich Environments. Under review,* Annals of the NY Academy of Sciences, 2024.

CONFERENCE PRESENTATIONS

Iaschi, M. "Addition of a Peristaltic Wave Improves Multilegged Locomotion", ICRA, Atlanta, USA, May 2025.
Iaschi, M. "Addition of a Peristaltic Wave Improves Multilegged Locomotion", APS, Anaheim, USA, Mar 2025.
Iaschi, M. "Addition of a Peristaltic Wave Improves Multilegged Locomotion", SICB, Atlanta, USA, Jan 2025.
Iaschi, M. "Centipede Locomotion on Complex Environments", iPoLS Annual Meeting, Trieste, Italy, Jun 2024.

ROBOTICS PEER REVIEWER

• Peer reviewer for one robotics locomotion-related manuscript submitted to ICRA 2025.
• Peer reviewer for one soft robotics-related manuscript submitted to RoboSoft 2025.

ADDITIONAL SKILLS

• Languages: Fluent in English and Italian; intermediate in Spanish (B1); conversant in French (A2).
• Hobby: Author of adventure novels for young adults (written in Italian).