

Moritz Kirchleitner

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EDUCATION

ETH Zurich • M.Sc. Robotics, Systems and Control	Zurich, Switzerland
• Focus on robotic manipulation, control, and learning-based methods	Sep 2026 - present
Technical University Munich (TUM) • B.Sc. Mechanical Engineering	Munich, Germany
• Top 2% of Mechanical Engineering Department; Final grade: 1.4 (1.0 = best)	Oct 2022 — Mar 2026
Georgia Institute of Technology • Exchange Semester	Atlanta, GA, USA
• Focus on control engineering, robotic systems, and renewable energy systems; GPA 4.0/4.0	Jan 2025 — May 2025

WORK EXPERIENCE

Agile Robots • Working Student	Munich, Germany
• Contributing to novel actuator design for the humanoid robot Agile One	Dec 2025 — Sep 2026
• Developing a novel tendon-driven robotic hand	
• Developed a quick-change adapter for rapid robotic hand replacement and testing	
Agile Robots • Working Student	Munich, Germany
• Performed troubleshooting, calibration, and functional testing of a dexterous robotic hand	May 2024 — Dec 2024
• Created a detailed production manual including flashing and calibration procedures	
• Conducted functional testing of printed circuit boards (PCBs) to ensure quality	
Heidenhain AG • Service Technician Intern	Traunreut, Germany
• Maintained and set up roll bending and laser welding machines	Jul 2022 — Sep 2022
• Performed quality control on metal ring production using precision gauges	Mar 2023 — May 2023

PROJECTS / EXTRACURRICULAR ENGAGEMENT

Chair of Healthcare & Rehabilitation Robotics • Bachelor's Thesis (Grade 1.0)	Munich, Germany
• Design and implementation of an antagonistic tendon-driven variable stiffness actuator for robotic fingers	Sep 2025 — Feb 2026
• Development of experimental test benches and control software to evaluate torque-deflection characteristics and cross-coupling effects in an underactuated robotic hand	
RoboTUM • Senior Member & Co-Lead, Hardware Department Student Organization at TUM	Munich, Germany
• Contributing to the development of a humanoid robot aiming to be the world's fastest	Oct 2025 — present
• Designing mechanical test setups to validate actuator and joint performance	
EyeVoices • Head of Hardware Student Organization at TUM	Munich, Germany
• Development of an assistive communication platform for people with severe paralysis	Sep 2025 — present
Self-Balancing Robot Development • Course Project (Georgia Tech)	Atlanta, GA, USA
• Built both a simulation and a physical prototype of a ball-and-plate self-balancing robot	Jan 2025 — May 2025
• Developed and tuned a PD controller in MATLAB/Simulink and applied it to the real robot	
• Awarded extra credit as the course's "hardest working team"	
Ferienakademie, TUM, FAU & University of Stuttgart • Scholarship	South Tyrol, Italy
• Participated in a two-week interdisciplinary project on environmental sustainability with students from diverse technical backgrounds	Sep 2024 — Oct 2024

SKILLS & INTERESTS

Languages: German (native), English (fluent)

Technical: C, Python, MATLAB, SolidWorks, Fusion 360, CAM, LaTeX, Git

Interests: Robotics, Cycling, Gym, Reading, 3D printing