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## Work Experiences

- Mar '24 - Now **Postdoctoral Researcher**, *Department of Cybernetics, Czech Technical University in Prague, Czechia*  
○ **Lab:** Multi-robot systems group (MRS)
- May '22 - Nov '23 **Postdoctoral Researcher**, *Cognitive Robotics Department, Delft University of Technology, The Netherlands*  
○ **Lab:** Reliable Robot Control Lab (R2C)
- Nov '18-May '22 **Doctoral Researcher**, *Department of Industrial Engineering, University of Trento, Italy*  
○ **Lab:** The Interdepartmental Robotics Labs (IDRA)
- Sep '21-Feb '22 **Visiting Scholar**, *University of California, Riverside, United States*  
○ **Research Activity:** Networked system control, Reinforcement learning
- Oct-Nov 2025 **Guest Lecturer**, *Czech Technical University in Prague, Prague*  
○ **Department:** Cybernetics  
○ **Course:** Multi-Robot Systems
- Oct '18-Sep '20 **Teaching Assistant**, *University of Trento, Italy*  
○ **Department:** Information Engineering and Computer Science (DISI)  
○ **Course:** Systems Theory
- Jun-Nov 2018 **Postgraduate Researcher**, *held at University of Trento, Italy*

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## Education

- Nov '18-May '22 **PhD in Mechatronics**, *University of Trento, Italy*  
○ **PhD Thesis:** Distributed control algorithms for a team of service robots  
○ **Research Interests:** Multi-robot systems, Distributed control, Mobile robotics
- Sep '15-Mar '18 **MSc in Mechatronics Engineering**, *University of Trento, Italy*  
○ **Curriculum in Electronics and Robotics**  
○ **Grade:** magna cum laude  
○ **Master thesis:** "Control of a Synchrotron with LMI-based Techniques"
- Sep '12-Jul '15 **BSc in Industrial Engineering**, *University of Trento, Italy*  
○ **Bachelor thesis:** "Study of Lateral Vibrations in a Beam"
- Sep '06-Jun '12 **Secondary Education Diploma**, *Liceo Scientifico "L. Da Vinci", Trento, Italy*

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## Publications

### Journal Articles

- [J10] **M. Boldrer, V. Krátký, V. Walter, M. Saska**, *Distributed Lloyd-Based Algorithm for Uncertainty-Aware Multi-Robot Under-Canopy Flocking*, In *Robotics and Automation Letters*, Under Review.
- [J9] **M. Boldrer, V. Krátký, M. Saska**, *Aerial Robots Persistent Monitoring and Target Detection: Deployment and Assessment in the Field*, Springer, *Autonomous Robots*, 2026  
doi: 10.1007/s10514-025-10239-y.
- [J8] **M. Boldrer, A. Serra-Gomez, L. Lyons, V. Krátký, J. Alonso-Mora, L. Ferranti**, *Rule-Based Lloyd Algorithm for Multi-Robot Motion Planning and Control with Safety and Convergence Guarantees*, in *International Journal of Robotics Research*, Under Review.
- [J7] **L. Lyons, M. Boldrer, L. Ferranti**, *Distributed Attack-Resilient Platooning Against False Data Injection*, *IEEE Transactions on Vehicular Technology*, 2025  
doi: 10.1109/TVT.2025.3614452.
- [J6] **M. Boldrer, L. Lyons, L. Palopoli, D. Fontanelli, L. Ferranti**, *Time-inverted Kuramoto Model Meets Lissajous Curves: Multi-Robot Persistent Monitoring and Target Detection*, in *IEEE Robotics and Automation Letters*, 2022  
doi: 10.1109/LRA.2022.3224661.
- [J5] **M. Boldrer, L. Palopoli, D. Fontanelli**, *A Unified Lloyd-based Framework for Multi-Agent Collective Behaviours*, in Elsevier, *Robotics and Autonomous Systems*, 2022  
doi: 10.1016/j.robot.2022.104207.
- [J4] **M. Boldrer, F. Pasqualetti, L. Palopoli, D. Fontanelli**, *Multi-Agent Persistent Monitoring via Time-Inverted Kuramoto Dynamics*, in *IEEE, Control Systems Letters*, 2022  
doi: 10.1109/LCSYS.2022.3178294.

- [J3] **M. Boldrer, A. Antonucci, P. Bevilacqua, L. Palopoli, D. Fontanelli**, *Multi-Agent Navigation in Human-Shared Environments: a Safe and Socially-Aware Approach*, in Elsevier, Robotics and Autonomous Systems, 2021  
doi: 10.1016/j.robot.2021.103979.
- [J2] **M. Boldrer, P. Bevilacqua, L. Palopoli, D. Fontanelli**, *Graph Connectivity Control of a Mobile Robot Network with Mixed Dynamic Multi-Tasks*, in IEEE Robotics and Automation Letters, 2021  
doi: 10.1109/LRA.2021.3061072.
- [J1] **M. Boldrer, M. Andreetto, S. Divan, L. Palopoli, D. Fontanelli**, *Socially-aware Reactive Obstacle Avoidance Strategy based on Limit Cycle*, in IEEE Robotics and Automation Letters, 2020  
doi: 10.1109/LRA.2020.2976302.

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## Language Skills

Italian Mother tongue  
English Fluent

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## Computer Skills

Languages C++, Python  
Software/Tools Vim/Neovim, Tmux, Tmuxinator, Bash, Latex, ROS, Git, Github, Docker, Docker hub, Apptainer, Ansible, Maple/Maplesim, Matlab/Simulink, Kdenlive.  
OS Linux

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## Personal Information

Driving license B  
Sports Table tennis, Tennis, Football, Basketball  
Linkedin.com [Manuel Boldrer](#) - Professional profile.  
Website <https://manuelboldrer.github.io>