

RIGHETTI Ludovic (ORCID: 0000-0002-6458-9112)Nationality: French, web site: <https://engineering.nyu.edu/faculty/ludovic-righetti>

- **CURRENT POSITION**

Associate Professor, New York University, USA (since 09/2017)

- **EDUCATION**

- 2008 Doctorate in Science, EPFL, Switzerland
- 2004 Engineering Diploma in Computer Science, EPFL, Switzerland

- **INTERNATIONAL RECOGNITION (honors, prizes)**

- 2022 Best Paper Award given by the IEEE Robotics and Automation Society's Technical Committee on Model-Based Optimization for Robotics
- 2019 Invited Keynote Speaker at the IEEE-RAS International Conference on Humanoid Robots
- 2019 Google Faculty Research Award
- 2016 Heinz Maier-Leibnitz Prize, Awarded by the German Research Foundation and the German Federal Ministry of Education and Research
- 2016 IEEE Robotics and Automation Society Early Career Award, "for contributions to the theory of, and experiments in, robot locomotion and manipulation"
- 2014 European Research Council Starting Grant
- 2011 Best Paper Award, IEEE/RSJ International Conference on Intelligent Robots and Systems
- 2010 Georges Giralt PhD Award for the best PhD thesis in Europe in the field of robotics

- **SUPERVISION:** 12 PhD students (5 on-going), 5 post-Docs.

- **SCIENTIFIC PRODUCTION:** <https://scholar.google.com/citations?user=LuA1j4oAAAAJ&oi=ao>

Peer-Reviewed Publications: 41 journals, 79 conferences, 3 book chapters

Google Scholar Citation Metric h-index: 45, i10-index: 86, citations: 7321 (as of 11/09/2023)

- **MOST RELEVANT PAPERS**

1. A. Meduri, P. Shah, J. Viereck, M. Khadiv, I. Havoutis, and L. Righetti, "BiConMP: A Nonlinear Model Predictive Control Framework for Whole Body Motion Planning," IEEE Transactions on Robotics, vol. 39, no. 2, pp. 905–922, Apr. 2023, doi: 10.1109/TRO.2022.3228390.
2. B. Ponton, M. Khadiv, A. Meduri, and L. Righetti, "Efficient Multi-Contact Pattern Generation with Sequential Convex Approximations of the Centroidal Dynamics," IEEE Transactions on Robotics, vol. 37, no. 5, pp. 1661–1679, Feb. 2021, doi: 10.1109/TRO.2020.3048125.
3. B. Hammoud, M. Khadiv, and L. Righetti, "Impedance Optimization for Uncertain Contact Interactions Through Risk Sensitive Optimal Control," IEEE Robotics and Automation Letters, vol. 6, no. 3, pp. 4766–4773, Jul. 2021, doi: 10.1109/LRA.2021.3068951.
4. F. Grimmering, A. Meduri, M. Khadiv, J. Viereck, M. Wütrich, M. Naveau, V. Berenz, S. Heim, F. Widmaier, T. Flayols, J. Fiene, A. Badri-Spröwitz, L. Righetti, "An Open Torque-Controlled Modular Robot Architecture for Legged Locomotion Research," IEEE Robotics and Automation Letters, vol. 5, no. 2, pp. 3655–3662, Apr. 2020, doi: 10.1109/LRA.2020.2976639.
5. A. Herzog, N. Rotella, S. Mason, F. Grimmering, S. Schaal, and L. Righetti, "Momentum Control with Hierarchical Inverse Dynamics on a Torque-Controlled Humanoid," Autonomous Robots, vol. 40, no. 3, pp. 473–491, Mar. 2016, doi: 10.1007/s10514-015-9476-6.

- **RELEVANT EDITORIAL, SERVICE AND OUTREACH ACTIVITIES**

- From January 2024, Vice-President, IEEE Robotics and Automation Society; 2019-2022, co-chair of the IEEE-RAS Technical Committee on Humanoid Robots; 2017-2022, IEEE Robotics and Automation Research and Practice Ethics in Robotics and Automation Committee.
- Since 2023, Associate Editor, IEEE Transactions on Robotics; since 2019, Editor, IEEE-RAS International Conference on Humanoid Robots; 2015-2021, Associate Editor, IEEE Robotics and Automation Letters.
- Since 2023, Advisory Board member for the Stockholm International Peace Research Institute (SIPRI) and the UN Office for Disarmament Affairs initiative on Responsible Innovation in AI for Peace and Security; since 2014, regular civilian expert in robotics and AI for SIPRI and the International Committee of the Red Cross.

- **MAJOR COLLABORATIONS:** LAAS-CNRS (Gepetto team); Max-Planck Institute for Intelligent Systems (F. Grimmering); Carolina State University (H. Su); Univ. of Trento (A. Del Prete); INRIA Paris (J. Carpentier, J. Ponce); Stanford Univ. (J. Bohg); KU Leuven (A. Badri-Spröwitz), Meta (F. Meier)

- **TEACHING ACTIVITIES (current or planned):** co-coordinator of NYU's undergraduate minor and M.Sc. robotics programs; M.Sc. and B.Sc.-level robotics, RL and optimal control classes at NYU every semester.