

## Standards

- 2022 **IEEE Standard for Autonomous Robotics (AuR) Ontology**. IEEE 1872.2-2021. Published: 2022-05-12.

## Journals

- 2022 A. Gottardi, S. Tortora\*, E. Tosello\*, E. Menegatti, **Shared Control in Robot Teleoperation With Improved Potential Fields**. In IEEE Transactions on Human-Machine Systems, vol. 52, no. 3, pp. 410-422, June 2022, doi: 10.1109/THMS.2022.3155716.
- P. J.S. Gonçalves, A. Olivares Alarcos, J. Bermejo-Alonso, S. Borgo, M. Diab, M. Habib, H. Kumar Nakawala, S. V. Ragavan, R. Sanz, E. Tosello, H. Li. **IEEE Standard for Autonomous Robotics Ontology**. IEEE Robotics & Automation Magazine, vol. 28, no. 3, pp. 171-173, Sept. 2021, doi: 10.1109/MRA.2021.3095993.
- 2020 N. Castaman, E. Tosello, M. Antonello, N. Bagarello, S. Gandin, M. Carraro, M. Munaro, R. Bortoletto, S. Ghidoni, E. Menegatti, E. Pagello. **RUR53: an Unmanned Ground Vehicle for Navigation, Recognition, and Manipulation**. Advanced Robotics, Journal of. *Available online: 03 nov 2020*.
- E. P. de Freitas, J. I. Olszewska, J. L. Carbonera, S. R. Fiorini, A. Khamis, S. V. Ragavan, M. Barreto, E. Prestes, M. K. Habib, S. Redfield, A. Chibani, P. Goncalves, J. Bermejo-Alonso, R. Sanz, E. Tosello, H. Li, A. Olivares-Alarco. **Ontological Concepts for Information Sharing in Cloud Robotics**. Ambient Intelligence and Humanized Computing, Journal of. *Available online: 10 Jun 2020*.
- 2016 S. Michieletto, E. Tosello, E. Pagello, E. Menegatti. **Teaching Humanoid Robotics by means of Human Teleoperation through RGB-D Sensors**. Robotics and Autonomous Systems, Journal of. *Available online: 23 Oct 2015*.

## Conference Proceedings

- 2022 A. Franceschetti\*, E. Tosello\*, N. Castaman, S. Ghidoni. **Robotic Arm Control and Task Training Through Deep Reinforcement Learning**. In: Ang Jr, M.H., Asama, H., Lin, W., Foong, S. (eds) Intelligent Autonomous Systems 16. IAS 2021. Lecture Notes in Networks and Systems, vol 412. Springer, Cham.
- L. Tagliapietra\*, E. Tosello\*, E. Menegatti. **A Planning Domain Definition Language Interpreter and Knowledge Base for Efficient Automated Planning**. In: Ang Jr, M.H., Asama, H., Lin, W., Foong, S. (eds) Intelligent Autonomous Systems 16. IAS 2021. Lecture Notes in Networks and Systems, vol 412. Springer, Cham.
- 2020 L. Tagliapietra\*, E. Tosello\*, E. Menegatti. **CURAMI: Human-Robot Collaboration for Intelligent Assembly Tasks**. 2<sup>a</sup> Conferenza Italiana di Robotica e Macchine Intelligenti (I-RIM 2020); Proceedings of. Dic 10-12. 2020. Online.
- G. Nicola\*, L. Tagliapietra\*, E. Tosello\*, N. Navarin, S. Ghidoni, E. Menegatti. **Robotic Object Sorting via Deep Reinforcement Learning: a generalized approach**. The 29th IEEE International Conference on Robot and Human Interactive Communication (IEEE ROMAN 2020); Proceedings of. Aug 31-Sept 4, 2020. Naples (Italy).
- 2019 F. Ceola, E. Tosello, L. Tagliapietra, G. Nicola, S. Ghidoni. **Robot Task Planning via Deep Reinforcement Learning: a Tabletop Object Sorting Application**. 2019 IEEE International Conference on Systems, Man, and Cybernetics (IEEE SMC 2019); Proceedings of. Oct 6-9, 2019. Bari (Italy)
- L. Fortunati, J. Höflich, A. M. Manganelli, E. Tosello, G. Ferrin. **The uncanny theory under scrutiny**. 10th Italian Forum Ambient Assisted Living (ForItAAL); Proceedings of. Jun 19 - 21, 2019. Ancona (Italy).
- E. Tosello, N. Castaman, E. Menegatti. **Using robotics to train students for Industry 4.0**. International Federation of Automatic Control Advances in Control Education Symposium (IFAC-ACE); Proceedings of. Jul 7 - 9, 2019. Philadelphia, PA (USA).
- A. Dalla Libera, E. Tosello, S. Ghidoni, G. Pilonetto, R. Carli. **Proprioceptive Robot Collision Detection through Gaussian Process Regression**. 2019 American Control Conference (ACC); Proceedings of. Jul 10 - 19, 2019. Philadelphia, PA (USA).
- 2018 E. Tosello, N. Castaman, S. Michieletto E. Menegatti. **Teaching Robot Programming for Industry 4.0**. International Conference Educational Robotics 2018 (EduRobotics 2018). October 11, 2018. Rome (Italy).

- N. Castaman, E. Tosello, E. Pagello. **Conditional Task and Motion Planning through an Effort-based Approach**. Simulation, Modeling, and Programming for Autonomous Robots. IEEE International Conference, SIMPAR 2018; Proceedings of. May 16-19, 2018. Brisbane (Australia).
- 2016 E. Tosello, Z. Fan, A. C. Gatto, E. Pagello. **Cloud-Based Task Planning for Smart Robots**. Intelligent Autonomous Systems 14: Proceedings of the 14th International Conference IAS-14. July 3-7, 2016. Shanghai (China). ISBN: 978-3-319-48036-7. pp. 285-300.
- N. Castaman, E. Tosello, E. Pagello. **A sampling-based Tree Planner for Navigation Among Movable Obstacles**. ISR 2016; 47th International Symposium on Robotics; Proceedings of. June 21-22, 2016. Munich (Germany).
- E. Tosello, S. Michieletto, E. Pagello. **Training master students to program both virtual and real autonomous robots in a teaching laboratory**. EDUCON 2016; IEEE Global Engineering Education Conference; Proceedings of. April 10-13, 2016. Abu Dhabi (AUE).
- 2014 S. Michieletto, E. Tosello, F. Romanelli, V. Ferrara, and E. Menegatti. **ROS-I Interface for COMAU Robots**. Simulation, Modeling, and Programming for Autonomous Robots. 4th International Conference, SIMPAR 2014; Proceedings of. October 20-23, 2014. Bergamo (Italy). Online ISBN: 978-3-319-11900-7. pp. 243-254.
- N. Boscolo, E. Tosello, S. Tonello, M. Finotto, R. Bortoletto, and E. Menegatti. **A Constraint Based Motion Optimization System for Quality Inspection Process Improvement**. Simulation, Modeling, and Programming for Autonomous Robots. 4th International Conference, SIMPAR 2014; Proceedings of. October 20-23, 2014. Bergamo (Italy). Online ISBN: 978-3-319-11900-7. pp. 545-553.
- E. Tosello, S. Michieletto, A. Bisson, E. Pagello, and E. Menegatti. **A Learning from Demonstration Framework for Manipulation Tasks**. ISR/Robotik 2014; 45th International Symposium on Robotics; Proceedings of. June 2-3, 2014. Munich (Germany). ISBN: 978-3-8007-3601-0. pp. 1-7.
- 2013 D. Kurabayashi, Y. Takahashi, R. Minegishi, E. Tosello, E. Pagello, R. Kanzaki. **Property Investigation of Chemical Plume Tracing Algorithm in an Insect Using Bio-machine Hybrid System**. Living Machines. 29 July - 2 August, 2013. London (United Kingdom). pp. 131-142.
- 2012 S. Tonello, G. P. Zanetti, M. Finotto, R. Bortoletto, E. Tosello, E. Menegatti. **WorkCellSimulator: A 3D Simulator for Intelligent Manufacturing. Simulation, Modeling, and Programming for Autonomous Robots**. Springer Verlag Berlin. November 5-8, 2012. Tsukuba (Japan). pp. 311-322.

---

## Workshops

- 2021 M. Thiella, E. Tosello, E. Pagello. **A first approach to AGI-based Robot Task Planning**. AIRO 2021, workshop of the 20th International Conference of the Italian Association for Artificial Intelligence (AI\*IA 2021). *under review*.
- 2018 E. Tosello, E. Pagello, S. Ghidoni. **Combining Deep Learning and Knowledge Bases to solve TAMP problems in the Cloud: benefits and challenges**. Collaboratively Working towards Ontology-based standards for Robotics and Automation, Workshop on. 2018 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS). October 5, 2018. Madrid (Spain).
- F. Vendramin, E. Tosello, N. Castaman, S. Ghidoni. **Learning Robot Task Planning primitives by means of Long Short-Term Memory Networks**. Combining Task and Motion Planning in the frame of Cloud Robotics. Workshop of. IEEE Simpar 2018 International Conference. May, 16, 2018. Brisbane (Australia).
- 2015 E. Tosello, Z. Fan, E. Pagello. **A Semantic Knowledge Base for Cognitive Robotics Manipulator**. Toward Intelligent Social Robots - Current Advances in Cognitive Robotics, Workshop on. Seoul, Korea. Nov 3rd, 2015.
- 2014 Z. Fan, E. Tosello, M. Palmia, and E. Pagello. **Applying Semantic Web Technologies to Multi-Robot Coordination**. NRF-IAS-2014; New Research Frontiers for Intelligent Autonomous Systems; Workshop. July 19, 2014. Venice (Italy).
- E. Tosello, R. Bortoletto, S. Michieletto, E. Pagello, and E. Menegatti. **An Integrated System to approach the Programming of Humanoid Robotics**. 4th International Workshop Teaching Robotics, Teaching with Robotics & 5th International Conference Robotics in Education; Proceedings of. July 18, 2014. Padova (Italy). ISBN 978-88-95872-06-3. pp. 93-100.