Elisa Tosello | Publications

Standards

2021 Standard for Autonomous Robotics (AuR) Ontology. IEEE Standard number P1872.2. to be published.

Magazines

2021 P. J.S. Gonçalves, A. Olivares Alarcos, J. Bermejo-Alonso, S. Borgo, M. Diab, M. Habib, H. Kumar Nakawala, S. V. Ragavan, R. Sanz, <u>E. Tosello</u>, H. Li. **IEEE Standard for Autonomous Robotics Ontology**. IEEE Robotics & Automation Magazine.

Journals

- 2021 A. Gottardi, S. Tortora*, <u>E. Tosello</u>*, E. Menegatti. **Shared Control for Robot Tele-operation with Improved Potential Fields**. Special issue "Human Interaction with Artificial Intellingence Systems', IEEE Transactions on Human-Machine Systems. *under review*.
 - E. Tosello, N. Castaman, L. Tagliapietra, E. Menegatti. RobIn 4.0: a Modular and Open-Source Robotics Program to Train Future Engineers for Industry 4.0. IEEE Transactions on Learning Technologies, Journal of. under review.
- 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, <u>E. Tosello</u>, 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

- A. Franceschetti*, <u>E. Tosello</u>*, N. Castaman, S. Ghidoni. Robotic Arm Control and Task Training through Deep Reinforcement Learning. The 16th International Conference on Intelligent Autonomous Systems (IAS-16); Proceedings of. to be published.

 L. Tagliapietra*, <u>E. Tosello</u>*, E. Menegatti. A Planning Domain Definition Language Interpreter and Knowledge Base for Efficient Automated Planning. The 16th International Conference on Intelligent Autonomous Systems (IAS-16); Proceedings of. to be published.
- 2020 L. Tagliapietra*, <u>E. Tosello</u>*, E. Menegatti. **CURAMI: Human-Robot Collaboration for Intelligent Assembly Tasks**. 2^a Conferenza Italiana di Robotica e Macchine Intelligenti (I-RIM 2020); Proceedings of. Dic 10-12. 2020. Online.

- G. Nicola*, L. Tagliapietra*, <u>E. Tosello</u>*, 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. Naple (Italy).
- 2019 F. Ceola, <u>E. Tosello</u>, 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, <u>E. Tosello</u>, 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, PD (USA).
 - A. Dalla Libera, <u>E. Tosello</u>, S. Ghidoni, G. Pillonetto, 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 <u>E. Tosello</u>, 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, <u>E. Tosello</u>, 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 <u>E. Tosello</u>, 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, <u>E. Tosello</u>, 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).
 - <u>E. Tosello</u>, 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).
- S. Michieletto, <u>E. Tosello</u>, 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, <u>E. Tosello</u>, 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 Biomachine Hybrid System. Living Machines. 29 July 2 August, 2013. London (United Kindom). pp. 131-142.
- 2012 S. Tonello, G. P. Zanetti, M. Finotto, R. Bortoletto, <u>E. Tosello</u>, E. Menegatti. **WorkCell-Simulator: 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

- 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 <u>E. Tosello</u>, Z. Fan, E. Pagello. **A Semantic Knwoledge Base for Cognitive Robotics Manipulator**. Toward Intelligent Social Robots Current Advances in Cognitive Robotics, Workshop on. Seul, Korea. Nov 3rd, 2015.
- 2014 Z. Fan, <u>E. Tosello</u>, 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.