# Juan G. Victores

#### Journal Articles (27)

- 1. Francisco J Naranjo-Campos, Juan G. Victores, and Carlos Balaguer. Expert-trajectory-based features for apprenticeship learning via inverse reinforcement learning for robotic manipulation. *Applied Sciences*, 14, 11 2024a. ISSN 2076-3417. doi: 10.3390/app142311131. URL https://doi.org/10.3390/app142311131 [robot] [assistive] (Q1)
- 2. Francisco J. Naranjo-Campos, Juan G. Victores, and Carlos Balaguer. Method for bottle opening with a dual-arm robot. *Biomimetics*, 9, 9 2024b. ISSN 2313-7673. doi: 10.3390/biomimetics9090577. URL https://doi.org/10.3390/biomimetics9090577 [robot] [assistive] (Q2)
- 3. Francisco J. Naranjo-Campos, Ainhoa De Matías-Martínez, Juan G. Victores, José A. Gutiérrez Dueñas, Almudena Alcaide, and Carlos Balaguer. Assistance in picking up and delivering objects for individuals with reduced mobility using the tiago robot. *Applied Sciences*, 14, 8 2024c. ISSN 2076-3417. doi: 10.3390/app14177536. URL https://doi.org/10.3390/app14177536 [robot] [assistive] (Q1)
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- 5. Rubén de-la Torre, Edwin Daniel Oña, Juan G. Victores, and Alberto Jardón. Spasticsim: a synthetic data generation method for upper limb spasticity modelling in neurorehabilitation. *Scientific Reports*, 14:1646, 1 2024. ISSN 2045-2322. doi: 10.1038/s41598-024-51993-w. URL https://doi.org/10.1038/s41598-024-51993-w [robot] [rehabilitation] (Q2)
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- 7. Raul Fernandez-Fernandez, Juan G. Victores, and Carlos Balaguer. Deep robot sketching: An application of deep q-learning networks for human-like sketching. *Cognitive Systems Research*, 81:57–63, 9 2023b. ISSN 1389-0417. doi: 10.1016/J.COGSYS.2023.05.004. URL https://doi.org/10.1016/J.COGSYS.2023.05.004 [robot] [xgnitive: cgda] (Q2)
- 8. Raul Fernandez-Fernandez, Juan G. Victores, Jennifer J. Gago, David Estevez, and Carlos Balaguer. Neural policy style transfer. *Cognitive Systems Research*, 72:23–32, 3 2022a. ISSN 1389-0417. doi: 10.1016/j.cogsys.2021.11.003. URL https://doi.org/10.1016/j.cogsys.2021.11.003 [robot] [xg-nitive: cgda] (Q2)
- 9. Andrea Gil Ruiz, Juan G. Victores, Bartek Łukawski, and Carlos Balaguer. Design of an active vision system for high-level isolation units through q-learning. *Applied Sciences*, 10:5927, 8 2020. ISSN 2076-3417. doi: 10.3390/app10175927. URL https://doi.org/10.3390/app10175927 [robot] [textiles: horus] (Q2)
- 10. David Estevez, Juan G. Victores, Raul Fernandez-Fernandez, and Carlos Balaguer. Enabling garment-agnostic laundry tasks for a robot household companion. *Robotics and Autonomous Systems*, 123: 103330, 1 2020. ISSN 0921-8890. doi: 10.1016/j.robot.2019.103330. URL https://doi.org/10.1016/j.robot.2019.103330 [robot] [textiles: folding] [textiles: ironing] (Q2)

- 11. Alice Stazio, Juan G. Victores, David Estevez, and Carlos Balaguer. A study on machine vision techniques for the inspection of health personnels' protective suits for the treatment of patients in extreme isolation. *Electronics*, 8:743, 6 2019. doi: 10.3390/electronics8070743. URL https://doi.org/10.3390/electronics8070743 [robot] [textiles: horus] (Q2)
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- 13. Raul Fernandez-Fernandez, Juan G. Victores, David Estevez, and Carlos Balaguer. Real evaluations tractability using continuous goal-directed actions in smart city applications. *Sensors*, 18:3818, 11 2018a. ISSN 1424-8220. doi: 10.3390/s18113818. URL https://doi.org/10.3390/s18113818 [robot] [xgnitive: cgda] (Q1)
- 14. Santiago Martinez, Juan Miguel Garcia-Haro, Juan G. Victores, Alberto Jardon, and Carlos Balaguer. Experimental robot model adjustments based on force-torque sensor information. *Sensors*, 18:836, 3 2018. ISSN 14248220. doi: 10.3390/s18030836. URL https://doi.org/10.3390/s18030836 [robot] [humanoid] (Q1)
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- 16. Eugenio Marinetto, Juan G. Victores, Mónica García-Sevilla, Mercedes Muñoz, Felipe Ángel Calvo, Carlos Balaguer, Manuel Desco, and Javier Pascau. Technical note: Mobile accelerator guidance using an optical tracker during docking in ioert procedures. *Medical Physics*, 44:5061–5069, 2017. ISSN 2473-4209. doi: 10.1002/mp.12482. URL http://dx.doi.org/10.1002/mp.12482 [robot] [medical] (Q1)
- 17. Konstantinos Loupos, Anastasios D Doulamis, Christos Stentoumis, Eftychios Protopapadakis, Konstantinos Makantasis, Nikolaos D Doulamis, Angelos Amditis, Philippe Chrobocinski, Juan G. Victores, Roberto Montero, Elisabeth Menendez, Carlos Balaguer, Rafa Lopez, Miquel Cantero, Roman Navarro, Alberto Roncaglia, Luca Belsito, Stephanos Camarinopoulos, Nikolaos Komodakis, and Praveer Singh. Autonomous robotic system for tunnel structural inspection and assessment. *International Journal of Intelligent Robotics and Applications*, pages 1–24, 2017. ISSN 2366-598X. doi: 10.1007/s41315-017-0031-9. URL https://doi.org/10.1007/s41315-017-0031-9 [robot] [construction]
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- 22. Juan G. Victores, Santiago Morante, Alberto Jardón, and Carlos Balaguer. An accessible interface for programming an assistive robot. *Journal of Accessibility and Design for All (JACCES)*, 4:161–176, 2014a. ISSN 2013-7087. doi: 10.17411/jacces.v4i3.49. URL http://dx.doi.org/10.17411/jacces.v4i3.49 [robot] [assistive]
- 23. Jonathan Crespo, Ramon Barber, Juan G. Victores, and Alberto Jardón. Algorithm for graph visibility obtainment from a map of non-convex polygons. *Journal of Mechanical Engineering and Robotics Research*, 3:150–170, 2014. ISSN 2278-0149. URL http://www.ijmerr.com/v3n2/ijmerr\_v3n2\_19.pdf [robot] [planning]
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- 27. Juan G. Victores, Santiago Martinez, Alberto Jardón, and Carlos Balaguer. Robot-aided tunnel inspection and maintenance system by vision and proximity sensor integration. *Automation in Construction*, 20:629–636, 2011a. ISSN 09265805. doi: 10.1016/j.autcon.2010.12.005. URL http://dx.doi.org/10.1016/j.autcon.2010.12.005 [robot] [construction] (Q1)

## Patents (2)

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- 3. David Estevez, Juan G. Victores, and Carlos Balaguer. A new generation of entertainment robots enhanced with augmented reality. pages 129–136. CSIC, 5 2016a. URL http://www.robocity2030.org/events/event/evento-esp-2-2/[robot] [video-game]
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- 7. Alberto Jardón, Félix R. Cañadillas, Juan G. Victores, Santiago Martínez, and Carlos Balaguer. A review of eight years of ceabot contest: A national wide mini humanoids competition. pages 41–52. Springer International Publishing, 2014a. ISBN 978-3-319-03652-6. doi: 10.1007/978-3-319-03653-3\_4. URL http://dx.doi.org/10.1007/978-3-319-03653-3\_4 [robot] [contests]
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- 9. Carlos Balaguer and Juan G. Victores. Robotic tunnel inspection and repair. pages 445–460. CRC Press, 2010. URL http://www.crcpress.com/product/isbn/9780415551052 [robot] [construction]

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- 2. Alicia Herrera García-Mascaraque, Ignacio Montesino, Juan G. Victores, Carlos Balaguer, and Alberto Jardón. Integrator for musculoskeletal simulation in python. Universidade da Coruña. Servizo de publicacións, 7 2024. URL https://doi.org/10.17979/ja-cea.2024.45.10802 [robot] [assistive]
- 3. Ignacio Montesino, Hugo Alonso Camara, Juan G. Victores, Carlos Balaguer, and Alberto Jardón. Geodesic restricted aruco-based positioning for vr rehabilitation robotics. Universidade da Coruña. Servizo de publicacións, 7 2024b. URL https://doi.org/10.17979/ja-cea.2024.45.10964 [robot] [assistive]
- 4. Jaime Mas, Juan G. Victores, and Carlos Balaguer. Optimización de caminata con aprendizaje por refuerzo en humanoide teo. Universidade da Coruña. Servizo de publicacións, 7 2024. URL https://doi.org/10.17979/ja-cea.2024.45.10950 [robot] [humanoid]

- 5. Francisco J. Naranjo-Campos, Ainhoa De Matías-Martínez, Juan G. Victores, José A. Gutiérrez Dueñas, Almudena Alcaide, and Carlos Balaguer. Robot tiago para servicio en cafetería. Universidade da Coruña. Servizo de publicacións, 7 2024d. URL https://doi.org/10.17979/ja-cea.2024.45. 10795 [robot] [assistive]
- 6. Bartek Łukawski, Alberto Rodríguez-Sanz, Elisabeth Menendez, Juan G. Victores, and Carlos Balaguer. A user-friendly point cloud processing pipeline for interfacing pcl with yarp. Universidade da Coruña. Servizo de publicacións, 7 2024a. URL https://doi.org/10.17979/ja-cea.2024.45.10925 [robot] [teleoperation]
- 7. Ana Calzada, Bartek Łukawski, Juan G. Victores, and Carlos Balaguer. Teleoperation of the robot tiago with a 3d mouse controller. pages 133–138. Universidad de Extremadura. Servicio de Publicaciones, 5 2024. ISBN 978-84-9127-262-5. URL http://hdl.handle.net/10662/21260 [robot] [teleoperation]
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- 10. Francisco José Naranjo-Campos, Ainhoa de Matías Martínez, Juan G. Victores, José Antonio Gutiérrez Dueñas, Almudena Alcaide, and Carlos Balaguer. Detección y manipulación de botellas con el robot móvil manipulador tiago. pages 37–42. Universidad de Extremadura. Servicio de Publicaciones, 5 2024e. ISBN 978-84-9127-262-5. URL http://hdl.handle.net/10662/21260 [robot] [assistive]
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#### Research Stays (2)

Oct. 2018 -The University of Manchester. Cognitive Robotics Lab. Jan. 2019

Estancia de 3 meses destinado a la investigación del uso de Deep Learning para el estudio

de conceptos abstractos con el robot iCub (Manchester, UK).

Sept. 2011 -Istituto Italiano di Tecnologia. Department of Robotics, Brain and Cognitive Sciences.

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#### Workshop Organizer (2)

- 1. Juan G. Victores, Lorenzo Natale, Eiichi Yoshida. Towards Humanoid Robots OS. HUMANOIDS. Cancun, Mexico. Nov 15. 2016. https://roboticslab-uc3m.github.io/workshop-humanoids2016/
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