

Juan G. Victores

Journal Articles (19)

1. 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(17), 2020. ISSN 2076-3417. doi: 10.3390/app10175927. URL <https://www.mdpi.com/2076-3417/10/17/5927> [robot] [textiles: horus] (Q2)
2. 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, jan 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)
3. 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(7):743, jun 2019. doi: 10.3390/electronics8070743. URL <https://doi.org/10.3390/electronics8070743> [robot] [textiles: horus] (Q2)
4. Jennifer J. Gago, Juan G. Victores, and Carlos Balaguer. Sign language representation by TEO humanoid robot: End-user interest, comprehension and satisfaction. *Electronics*, 8(1):57, jan 2019a. ISSN 2079-9292. doi: 10.3390/electronics8010057. URL <https://doi.org/10.3390/electronics8010057> [robot] [sign-language] (Q2)
5. 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(11):3818, nov 2018a. ISSN 1424-8220. doi: 10.3390/s18113818. URL <https://doi.org/10.3390/s18113818> [robot] [xgnitive: cgda] (Q1)
6. 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(3): 836, mar 2018. ISSN 14248220. doi: 10.3390/s18030836. URL <https://doi.org/10.3390/s18030836> [robot] [humanoid] (Q1)
7. Elisabeth Menendez, Juan G. Victores, Roberto Montero, Santiago Martínez, and Carlos Balaguer. Tunnel structural inspection and assessment using an autonomous robotic system. *Automation in Construction*, 87:117–126, mar 2018. ISSN 09265805. doi: 10.1016/j.autcon.2017.12.001. URL <https://doi.org/10.1016/j.autcon.2017.12.001> [robot] [construction] (Q1)
8. 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(10):5061–5069, 2017. ISSN 2473-4209. doi: 10.1002/mp.12482. URL <http://dx.doi.org/10.1002/mp.12482> [robot] [medical] (Q1)
9. 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]
10. David Estevez, Juan G. Victores, Santiago Morante, and Carlos Balaguer. Robot Devastation: Using DIY Low-Cost Platforms for Multiplayer Interaction in an Augmented Reality Game. *EAI Endorsed Transactions on Collaborative Computing*, 15(3):1–5, 2015a. doi: 10.4108/icst.intetain.2015.259753. URL <http://dx.doi.org/10.4108/icst.intetain.2015.259753> [robot] [video-game]
 11. Santiago Morante, Juan G. Victores, and Carlos Balaguer. Cryptobotics: Why robots need cyber safety. *Frontiers in Robotics and AI*, 2(23):1–4, 2015a. doi: 10.3389/frobt.2015.00023. URL <http://dx.doi.org/10.3389/frobt.2015.00023> [robot] [cryptography]
 12. Roberto Montero, Juan G. Victores, Santiago Martínez, Alberto Jardón, and Carlos Balaguer. Past, Present and Future of Robotic Tunnel Inspection. *Automation in Construction*, 59:99–112, 2015a. doi: 10.1016/j.autcon.2015.02.003. URL <http://dx.doi.org/10.1016/j.autcon.2015.02.003> [robot] [construction] (Q1)
 13. Santiago Morante, Juan G. Victores, Alberto Jardón, and Carlos Balaguer. Humanoid Robot Imitation through Continuous Goal-Directed Actions: An Evolutionary Approach. *Advanced Robotics*, 29(Special issue: Humanoid robots):303–314, 2015b. ISSN 1568-5535. doi: 10.1080/01691864.2014.964314. URL <http://dx.doi.org/10.1080/01691864.2014.964314> [robot] [xgnitive: cgda] (Q4)
 14. 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(3):161–176, 2014a. ISSN 2013-7087. doi: 10.17411/jacces.v4i3.49. URL <http://dx.doi.org/10.17411/jacces.v4i3.49> [robot] [assistive]
 15. 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(2):150–170, 2014. ISSN 2278-0149. URL http://www.ijmerr.com/v3n2/ijmerr_v3n2_19.pdf [robot] [planning]
 16. Santiago Martínez, Alberto Jardón, Juan G. Victores, and Carlos Balaguer. Flexible Field Factory for Construction Industry. *Assembly Automation*, 33(2):175–183, 2013. doi: 10.1108/01445151311306708. URL <http://dx.doi.org/10.1108/01445151311306708> [robot] [construction] (Q4)
 17. Alberto Jardón, Juan G. Victores, Santiago Martínez, and Carlos Balaguer. Experience acquisition simulator for operating microtunneling boring machines. *Automation in Construction*, 23(0):33–46, 2012a. doi: 10.1016/j.autcon.2011.12.002. URL <http://dx.doi.org/10.1016/j.autcon.2011.12.002> [robot] [construction] (Q1)
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 19. 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(5):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)

1. Alberto Jardón Huete, Santiago Martínez, Juan G. Victores, Carlos Balaguer, Rafael Portero, and Marc Martí. Sistema y método para la verificación de la trayectoria de un tunel, 2014. URL <http://invenes.oepm.es/InvenesWeb/detalle?referencia=P201330794> [robot] [construction]
2. Juan G. Victores, Santiago Martinez, Alberto Jardón, and Carlos Balaguer. Tool and method for the automatic remote application of strips of fibre-reinforced polymer tape, comprising the dispensing of epoxy adhesive, 2011b. URL <http://www.google.im/patents/WO2011138481A1?cl=en> [robot] [construction]

Book Chapters (8)

1. Raul Fernandez-Fernandez, Juan G. Victores, and Carlos Balaguer. New Trends and Challenges in the Automatic Generation of New Tasks for Humanoid Robots. In *Robocity16: Open Conference on Future Trends in Robotics*, pages 169–176. CSIC, Madrid, may 2016. ISBN 978-84-608-8452-1. URL <http://www.robocity2030.org/events/event/evento-esp-2-2/> [xgnitive: cgda]
2. David Estevez, Juan G. Victores, and Carlos Balaguer. A New Generation of Entertainment Robots Enhanced with Augmented Reality. In *RoboCity16: Open Conference on Future Trends in Robotics*, pages 129–136. CSIC, Madrid, may 2016a. URL <http://www.robocity2030.org/events/event/evento-esp-2-2/> [robot] [video-game]
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4. Roberto Montero, Juan G. Victores, Elisabeth Menéndez, and Carlos Balaguer. The Robot-Spect EU Project: Autonomous Robotic Tunnel Inspection. In *Robocity2030 13th Workshop EU robotic projects results*, pages 91–100. Leganés, 2015b. URL <http://www.robocity2030.org/events/event/13th-robocity2030-works> [robot] [construction]
5. Santiago Morante, Juan G. Victores, Santiago Martínez, and Carlos Balaguer. Force-sensorless friction and gravity compensation for robots. In *Advances in Intelligent Systems and Computing*, volume 418, chapter Robot 2015. Springer International Publishing, 2015c. ISBN 9783319271484. doi: 10.1007/978-3-319-27149-1_5. URL http://doi.org/10.1007/978-3-319-27149-1_5 [robot] [modelling]
6. 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. In Manuel A. Armada, Alberto Sanfeliu, and Manuel Ferre, editors, *ROBOT2013: First Iberian Robotics Conference*, 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] [con-tests]
7. Juan G. Victores, Félix R. Cañadillas, Santiago Morante, Alberto Jardón, and Carlos Balaguer. Assistive Robot Multi-modal Interaction with Augmented 3D Vision and Dialogue. In Manuel A. Armada, Alberto Sanfeliu, and Manuel Ferre, editors, *ROBOT2013: First Iberian Robotics Conference*, pages 209–217. Springer International Publishing, Madrid, 2014b. ISBN 978-3-319-03412-6. doi: 10.1007/978-3-319-03413-3_15. URL http://dx.doi.org/10.1007/978-3-319-03413-3_15 [robot] [assistive]

8. Carlos Balaguer and Juan G. Victores. Robotic tunnel inspection and repair. In *Technology Innovation in Underground Construction*, pages 445–460. CRC Press, 2010. URL <http://www.crcpress.com/product/isbn/9780415551052> [robot] [construction]

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1. J. Enrique Sierra-Garcia, Matilde Santos, and Juan G. Victores. Neural controller of UAVs with inertia variations. In *IDEAL 2019*, pages 169–177, Manchester, nov 2019. Springer International Publishing. ISBN 978-3-030-33617-2. doi: 10.1007/978-3-030-33617-2_19. URL https://doi.org/10.1007/978-3-030-33617-2_19 [robot] [control]
2. Jennifer J. Gago, Valentina Vasco, Bartek Łukawski, Ugo Pattacini, Vadim Tikhanoff, Juan G. Victores, and Carlos Balaguer. Sequence-to-Sequence Natural Language to Humanoid Robot Sign Language. In *EUROSIM 2019*, page 44, Logroño, jul 2019b. ARGESIM. ISBN 978-3-901608-92-6. doi: 10.11128/arep.58. URL <https://www.doi.org/10.11128/arep.58> [robot] [sign-language]
3. David Estevez, Juan G. Victores, Raul Fernandez-Fernandez, and Carlos Balaguer. Towards Clothes Hanging via Cloth Simulation and Deep Convolutional Networks. In *EUROSIM 2019*, page 35, Logroño, jul 2019. ARGESIM. ISBN 978-3-901608-92-6. doi: 10.11128/arep.58. URL <https://www.doi.org/10.11128/arep.58> [robot] [textiles: hanging]
4. Raul Fernandez-Fernandez, Juan G. Victores, David Estevez, and Carlos Balaguer. Quick, Stat!: A Statistical Analysis of the Quick, Draw! Dataset. In *EUROSIM 2019*, page 27, Logroño, jul 2019. ARGESIM. ISBN 978-3-901608-92-6. doi: 10.11128/arep.58. URL <https://www.doi.org/10.11128/arep.58> [robot] [xgnitive: drl]
5. Jennifer J. Gago, Bartek Łukawski, Juan G. Victores, and Carlos Balaguer. A Study on the Effects of an Embodied Humanoid Robot Representing Sign Language. In *Gesture-Sign Workshop*, pages 26–28, Prague, 2019c. URL https://calc.ff.cuni.cz/en/gswp19_programme/ [robot] [sign-language]
6. Raul Fernandez-Fernandez, Juan G. Victores, David Estevez, and Carlos Balaguer. Robot Imitation through Vision, Kinesthetic and Force Features with Online Adaptation to Changing Environments. In *2018 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, pages 6546–6551, Madrid, 2018b. IEEE. ISBN 978-1-5386-8094-0. doi: IROS.2018.8593724. URL <https://doi.org/10.1109/IROS.2018.8593724> [robot] [xgnitive: cgda]
7. David Estevez, Juan G. Victores, Raul Fernandez-Fernandez, and Carlos Balaguer. Robotic ironing with 3D perception and force/torque feedback in household environments. In *IEEE, editor, 2017 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, volume 2017-Septe, pages 6484–6489, Vancouver, BC, Canada, 2017a. IEEE. ISBN 9781538626818. doi: 10.1109/IROS.2017.8206556. URL <https://doi.org/10.1109/IROS.2017.8206556> [robot] [textiles: ironing]
8. Elisabeth Menendez, Juan G. Victores, and Carlos Balaguer. Sistema robótico para la inspección y análisis estructural de túneles. In *Jornadas Nacionales de Robótica*, 2017a. URL <http://jnr2017.ai2.upv.es/wp-content/uploads/2016/11/Programa-JNR2017.pdf> [robot] [construction]
9. David Estevez, Juan G. Victores, and Carlos Balaguer. HORUS: Inspección robotizada de los trajes de protección del personal sanitario de pacientes en aislamiento de alto nivel, incluido el Ébola. In *Jornadas Nacionales de Robótica*, 2017b [robot] [horus]
10. Elisabeth Menendez, Juan G. Victores, Roberto Montero, and Carlos Balaguer. Autonomous Robotic System with Tunnel Inspection Tool Positioning. In *Proceedings of the International Symposium on Automation and Robotics in Construction (ISARC)*, pages 655–662, Taipei, Taiwan, 2017b. URL <https://doi.org/10.22260/ISARC2017/0091> [robot] [construction]

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12. David Estevez, Raul Fernandez-Fernandez, Juan G. Victores, and Carlos Balaguer. Robotic ironing with a humanoid robot using human tools. In *2017 IEEE International Conference on Autonomous Robot Systems and Competitions, ICARSC 2017*, pages 134–139. IEEE, 2017c. ISBN 9781509062331. doi: 10.1109/ICARSC.2017.7964065. URL <https://doi.org/10.1109/ICARSC.2017.7964065> [robot] [textiles: ironing]
13. David Estevez, Raul Fernandez-Fernandez, Juan G. Victores, and Carlos Balaguer. Improving and evaluating robotic garment unfolding: A garment-agnostic approach. In *2017 IEEE International Conference on Autonomous Robot Systems and Competitions, ICARSC 2017*. IEEE, 2017d. ISBN 9781509062331. doi: 10.1109/ICARSC.2017.7964077. URL <https://doi.org/10.1109/ICARSC.2017.7964077> [robot] [textiles: folding]
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19. Santiago Morante, Juan G Victores, and Carlos Balaguer. Automatic Demonstration and Feature Selection for Robot Learning. In *IEEE International Conference on Humanoid Robot - Humanoids*, pages 428–433, Seoul, 2015d. IEEE. doi: 10.1109/HUMANOIDS.2015.7363569. URL <http://dx.doi.org/10.1109/HUMANOIDS.2015.7363569> [robot] [xgnitive: cgda]
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System with Intelligent Vision for Tunnel Structural Assessment - System Architecture – The ROBO-SPECT EC project. In *Third conference on smart monitoring, assessment and rehabilitation of civil structures (SMAR)*, 2015. URL https://data.smar-conferences.org/SMAR_2015_Proceedings/html/L.html [robot] [construction]

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24. Carlos Balaguer, Roberto Montero, Juan G. Victores, Santiago Martínez, and Alberto Jardón. Towards Fully Automated Tunnel Inspection: A Survey and Future Trends. In Quang Ha, Xuesong Shen, and Ali Akbarnezhad, editors, *Proceedings of the 31st International Symposium on Automation and Robotics in Construction and Mining (ISARC 2014)*, pages 19–33, Sydney, Australia, 2014. University of Technology, Sydney. URL http://www.isarc2014.org/pdfs/ISARC2014_Proceedings-NewISBN.pdf [robot] [construction]
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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. |
| Dic. 2011 | Estancia de 3 meses destinado a la investigación del uso de Support Vector Machines y Gaussianas mixtas para el control en fuerza del robot iCub (Génova, Italia). |

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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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