

Concurso de acceso de cuerpos docentes universitarios

November 13, 2024

Nombre y apellidos: José Manuel Guerrero Higuera

1 Formación Académica

- **Doctor por la Universidad de León** (18/07/2017). Programa de doctorado: Tecnologías Avanzadas de Producción.
- **Máster oficial en sistemas telemáticos e informáticos** (Septiembre 2007–Junio 2010). Escuela Superior de Ciencias Experimentales y Tecnología, Universidad Rey Juan Carlos (Madrid). Impartido por el Grupo de Sistemas y Comunicaciones (GSyC).
- **Ingeniería informática** (Septiembre 2001–Junio 2007). Escuela Superior de Ciencias Experimentales y Tecnología, Universidad Rey Juan Carlos (Madrid).
- **Ingeniería técnica en informática de gestión** (Septiembre 1997–Junio 2001). Escuela Superior de Ciencias Experimentales y Tecnología, Universidad Rey Juan Carlos (Madrid).

2 Actividad Docente

- **Auditoría y análisis forense I.** Cursos académicos 2019–2020 y 2020–2021. Modalidades presencial y **online**. Máster Universitario en Investigación en Ciberseguridad. Universidad de León.
- **Sistemas confiables II.** Cursos académicos 2019–2020 y 2020–2021. Modalidades presencial y **online**. Máster Universitario en Investigación en Ciberseguridad. Universidad de León.
- **Seguridad en sistemas ciberfísicos**, 6 créditos. Cursos académicos 2017–2018, 2018–2019, 2019–2020 y 2020–2021. Modalidades presencial y **online**. Máster Universitario en Investigación en Ciberseguridad. Universidad de León.
- **Sistemas confiables I.** Cursos académicos 2016–2017 y 2017-1018, 2018–2019, 2019–2020 y 2020–2021. Modalidades presencial y **online**. Máster Universitario en Investigación en Ciberseguridad. Universidad de León.
- **Informática.** Curso académico 2016–2017. Modalidad presencial. Grado en Ingeniería Mecánica. Universidad de León.
- **Sistemas Operativos.** Cursos académicos 2011–2012, 2015–2016 y 2016–2017. Modalidad presencial. Grado en Ingeniería Informática. Universidad de León.
- **Ampliación de Sistemas Operativos.** Cursos académicos 2011–2012, 2012–2013, 2013–2014, 2014–2015, 2015–2016, 2016–2017, 2017–2018, 2018–2019, 2019–2020 y 2020–2021. Modalidad presencial. Grado en Ingeniería Informática. Universidad de León.
- **Computación de Altas Prestaciones.** Cursos académicos 2015–2016 y 2016–2017. Modalidad presencial. Máster Universitario en Ingeniería Informática. Universidad de León.
- **Computación Grid y Supercomputación.** Cursos académicos 2015–2016, 2016–2017, 2017–2018, 2018–2019, 2019–2020 y 2020–2021. Modalidad presencial. Grado en Ingeniería Mecánica. Universidad de León.
- **Informática.** Curso académico 2014–2015. Modalidad presencial. Grado en Ingeniería Aeroespacial. Universidad de León.
- **Diseño de Sistemas Operativos.** Curso académico 2011–2012. Modalidad presencial. Ingeniería Informática. Universidad de León.

3 Actividad Investigadora

3.1 Publicaciones de Investigación

3.1.1 Publicaciones en revistas indexadas

- [1] Adrián Campazas-Vega, Ignacio Samuel Crespo-Martínez, Ángel Manuel Guerrero-Higueras, Claudia Álvarez Aparicio, Vicente Matellán Olivera, and Camino Fernández-Llamas. Analyzing the influence of the sampling rate in the detection of malicious traffic on flow data. *Computer Networks*, page 109951, 2023
- [2] Ignacio Samuel Crespo-Martínez, Adrián Campazas-Vega, Ángel Manuel Guerrero-Higueras, Virginia Riego-DelCastillo, Claudia Álvarez Aparicio, and Camino Fernández-Llamas. Sql injection attack detection in network flow data. *Computers & Security*, 127:103093, 2023
- [3] Claudia Álvarez-Aparicio, Ángel Manuel Guerrero-Higueras, Miguel Ángel González-Santamarta, Adrián Campazas-Vega, Vicente Matellán, and Camino Fernández-Llamas. Biometric recognition through gait analysis. *Scientific Reports*, 12:14530, 8 2022. ISSN: 2045-2322. JCR SCIE (2021)–MULTIDISCIPLINARY SCIENCES: 19/134 (Q1), IF 4.996. DOI: 10.1038/s41598-022-18806-4
- [4] Francisco Javier Rodríguez-Lera, Miguel Ángel González-Santamarta, Ángel Manuel Guerrero-Higueras, Francisco Martín-Rico, and Vicente Matellán-Olivera. Towards explainability in robotics: A performance analysis of a cloud accountability system. *Expert Systems*, page e13004, 2022. ISSN: 0266-4720. JCR SCIE (2020)–COMPUTER SCIENCE, THEORY & METHODS: 31/110 (Q2), IF 2.587. DOI: 10.1111/exsy.13004
- [5] Claudia Álvarez-Aparicio, Ángel Manuel Guerrero-Higueras, Calderita Luis V., Francisco J. Rodríguez-Lera, Vicente Matellán, and Camino Fernández-Llamas. Convolutional neural networks refitting by bootstrapping for tracking people in a mobile robot. *Applied Sciences*, 11(21):10043, 10 2021. ISSN: 2076-3417. JCR SCIE (2020)–ENGINEERING, MULTIDISCIPLINARY: 38/90 (Q2), IF 2.679. DOI: 10.3390/app112110043
- [6] Francisco Martín, Jonatan Ginés, Francisco J. Rodríguez-Lera, Ángel Manuel Guerrero-Higueras, and Vicente Matellán. Client-server approach for managing visual attention, integrated in a cognitive architecture for a social robot. *Front. Neurobot*, 15:630386, 9 2021. ISSN: 1662-5218. JCR SCIE (2020)–COMPUTER SCIENCES, ARTIFICIAL INTELLIGENCE: 69/139 (Q2), IF 2.650. DOI: 10.3389/fnbot.2021.630386
- [7] Miguel Ángel Conde-González, Francisco JesRodríguez-Sedanos Rodríguez-Sedano-Sedano, Ángel Hernández-García, Alexis Gutiérrez-Fernández, and Ángel Manuel Guerrero-Higueras. Your teammate just sent you a new message! the effects of using telegram on individual acquisition of teamwork competence. *International Journal of Interactive Multimedia and Artificial Intelligence*, 21:225–233, 6 2021. ISSN: 1989-1660. JCR SCIE (2020)–COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE: 58/139 (Q2), IF 3.137. DOI: 10.9781/ijimai.2021.05.007
- [8] Adrián Campazas-Vega, Ignacio Samuel Crespo-Martínez, Ángel Manuel Guerrero-Higueras, and Camino Fernández-Llamas. Flow-data gathering using netflow sensors for fitting malicious-traffic detection models. *Sensors*, 20(24):7294, 2020. ISSN: 1424-8220. JCR SCIE (2020)–INSTRUMENTS & INSTRUMENTATION: 14/64 (Q1), IF 3.576. DOI: 10.3390/10.3390/s20247294
- [9] Miguel Á Conde, Francisco J Rodríguez-Sedano, Francisco J Rodríguez-Lera, Alexis Gutiérrez-Fernández, and Ángel M Guerrero-Higueras. Assessing the individual acquisition of teamwork competence by exploring students' instant messaging tools use: the whatsapp case study. *Universal Access in the Information Society*, pages 1–10, 2020. ISSN: 1615-5289. JCR SCIE (2020)–COMPUTER SCIENCE, CYBERNETICS: 9/23 (Q2), IF 3.078. DOI: 10.1007/s10209-020-00772-1
- [10] Virginia Riego, Manuel Castejón-Limas, Lidia Sánchez-González, Laura Fernández-Robles, Hilde Perez, Javier Diez-Gonzalez, and Ángel Manuel Guerrero-Higueras. Strong classification system for wear identification on milling processes using computer vision and ensemble learning. *Neurocomputing*, 2020. ISSN: 0925-2312. JCR SCIE (2020)–COMPUTER SCIENCES, ARTIFICIAL INTELLIGENCE: 30/139 (Q1), IF 5.719. DOI: 10.1016/j.neucom.2020.07.131
- [11] Bence Ferdinandy, Ángel Manuel Guerrero-Higueras, Éva Verderber, Francisco Javier Rodríguez-Lera, and Ádám Miklósi. Exploratory study of introducing HPC to non-ICT researchers: institutional strategy is possibly needed for widespread adaption. *Journal of Supercomputing*, 77:4317—4331, September 2021. ISSN: 0920-8542. JCR SCIE (2020)–COMPUTER SCIENCE, THEORY & METHODS: 33/110 (Q2), IF 2.474. DOI: 10.1007/s11227-020-03438-0
- [12] Ángel Manuel Guerrero-Higueras, Lidia Sánchez-González, Miguel Ángel Conde-González, and Manuel Castejón-Limas. Facilitating the learning process in parallel computing by using instant messaging. *Journal of Supercomputing*, 77:3899–3913, September 2021. ISSN: 0920-8542. JCR SCIE (2020)–COMPUTER SCIENCE, THEORY & METHODS: 33/110 (Q2), IF 2.474. DOI: 10.1007/s11227-020-03416-6

- [13] Jonatan Ginés, Francisco J Rodríguez-Lera, Francisco Martín, Ángel Manuel Guerrero, and Vicente Matellán. Depicting probabilistic context awareness knowledge in deliberative architectures. *Natural Computing*, pages 1–12, 2020. ISSN: 1567-7818. JCR SCIE (2020)–COMPUTER SCIENCE, THEORY & METHODS: 54/110 (Q2), IF 1.690. DOI: 10.1007/s11047-020-09798-z
- [14] Francisco Martín Rico, Francisco J Rodríguez-Lera, Jonatan Ginés Clavero, Ángel Manuel Guerrero-Higueras, and Vicente Matellán Olivera. An acceptance test for assistive robots. *Sensors*, 20(14):3912, 2020. ISSN: 1424-8220. JCR SCIE (2020)–INSTRUMENTS & INSTRUMENTATION: 14/64 (Q1), IF 3.576. DOI: 10.3390/s20143912
- [15] Miguel Á González-Santamarta, Francisco J Rodríguez-Lera, Claudia Álvarez-Aparicio, Ángel M Guerrero-Higueras, and Camino Fernández-Llamas. Merlin a cognitive architecture for service robots. *Applied Sciences*, 10(17):5989, 2020. ISSN: 2076-3417. JCR SCIE (2020)–ENGINEERING, MULTIDISCIPLINARY: 38/90 (Q2), IF 2.679. DOI: 10.3390/app10175989
- [16] Alexis Fernández-Gutiérrez, Ángel Manuel Guerrero-Higueras, Miguel Ángel Conde-González, and Camino Fernández-Llamas. Evaluación del resultado académico de los estudiantes a partir del análisis del uso de los sistemas de control de versiones. *Revista Iberoamericana de Educación a Distancia (RIED)*, 23(2):127–145, 2020. ISSN: 1138-2783. DOI: 10.5944/ried.23.2.26539
- [17] Ángel Manuel Guerrero-Higueras, Camino Fernández Llamas, Lidia Sánchez González, Alexis Gutierrez Fernández, Gonzalo Esteban Costales, and Miguel Ángel Conde González. Academic success assessment through version control systems. *Applied Sciences*, 10(4):1492, 2020. ISSN: 2076-3417. JCR SCIE (2020)–ENGINEERING, MULTIDISCIPLINARY: 38/90 (Q2), IF 2.679. DOI: 10.3390/app10041492
- [18] Francisco J Rodríguez Lera, Francisco Martín Rico, Angel Manuel Guerrero Higueras, and Vicente Matellán Olivera. A context-awareness model for activity recognition in robot-assisted scenarios. *Expert Systems*, 37(2):e12481, 12 2020. ISSN: 0266-4720. JCR SCIE (2020)–COMPUTER SCIENCE, THEORY & METHODS: 31/110 (Q2), IF 2.587. DOI: 10.1111/exsy.12481
- [19] Ángel Manuel Guerrero-Higueras, Noemí DeCastro-García, Francisco Javier Rodriguez-Lera, Vicente Matellán, and Miguel Ángel Conde. Predicting academic success through students' interaction with version control systems. *Open Computer Science*, 9(1):243–251, 2019. E-ISSN: 2299-1093. Scopus 2019 CiteScore: 1.4; Index Copernicus Value: 97.86; SCImago Journal Rank: 0.183; Source Normalized Impact per Paper: 0.963. DOI: 10.1515/comp-2019-0012
- [20] Claudia Álvarez-Aparicio, Ángel Manuel Guerrero-Higueras, Francisco Javier Rodríguez-Lera, Jonatan Ginés Clavero, Francisco Martín Rico, and Vicente Matellán. People detection and tracking using lidar sensors. *Robotics*, 8(3):75, 2019. E-ISSN:2218-6581. CiteScore 2019: 2.5. DOI: 10.3390/robotics8030075
- [21] Ángel Manuel Guerrero-Higueras, Claudia Álvarez-Aparicio, Maria Carmen Calvo Olivera, Francisco J Rodríguez-Lera, Camino Fernández-Llamas, Francisco Martín Rico, and Vicente Matellán. Tracking people in a mobile robot from 2d lidar scans using full convolutional neural networks for security in cluttered environments. *Frontiers in neurorobotics*, 12:85, 2019. ISSN: 1662-5218. JCR SCIE (2019)–COMPUTER SCIENCES, ARTIFICIAL INTELLIGENCE: 61/136 (Q2), IF 2.574. DOI: 10.3389/fnbot.2018.00085
- [22] Francisco J Rodríguez-Lera, Vicente Matellán-Olivera, Jesús Balsa-Comerón, Ángel Manuel Guerrero-Higueras, and Camino Fernández-Llamas. Message encryption in robot operating system: Collateral effects of hardening mobile robots. *Frontiers in ICT*, 5:2, 2018. E-ISSN: 2297-198X. CiteScore 2018: 1.96. DOI: 10.3389/fict.2018.00002
- [23] Claudia Álvarez-Aparicio, Ángel Manuel Guerrero-Higueras, Maria Carmen Calvo Olivera, Francisco J Rodríguez-Lera, Francisco Martín, and Vicente Matellán. Benchmark dataset for evaluation of range-based people tracker classifiers in mobile robots. *Frontiers in Neurorobotics*, 11:72, 2018. ISSN: 1662-5218. JCR SCIE (2018)–COMPUTER SCIENCES, ARTIFICIAL INTELLIGENCE: 42/134 (Q2), IF 3.000. DOI: 10.3389/fnbot.2017.00072
- [24] Ángel Manuel Guerrero-Higueras, Noemí DeCastro-García, and Vicente Matellán. Detection of cyber-attacks to indoor real time localization systems for autonomous robots. *Robotics and Autonomous Systems*, 99:75–83, 2018. ISSN: 0921-8890. JCR SCIE (2018)–COMPUTER SCIENCES, ARTIFICIAL INTELLIGENCE: 45/134 (Q2), IF 2.928. DOI: <https://doi.org/10.1016/j.robot.2017.10.006>
- [25] Ángel Manuel Guerrero-Higueras, Noemí DeCastro-García, Francisco Javier Rodríguez-Lera, and Vicente Matellán. Empirical analysis of cyber-attacks to an indoor real time localization system for autonomous robots. *Computers & Security*, 70:422–435, 2017. ISSN: 0167-4048. JCR SCIE (2017)–COMPUTER SCIENCES, INFORMATION SYSTEMS: 44/148 (Q2), IF 2.650. DOI: 10.1016/j.cose.2017.06.013

- [26] A Merino, E García-Ortega, L López, JL Sánchez, and AM Guerrero-Higueras. Synoptic environment, mesoscale configurations and forecast parameters for hailstorms in southwestern europe. *Atmospheric research*, 122:183–198, 2013. ISSN: 0169-8095. JCR SCIE (2013)–METEOROLOGY & ATMOSPHERIC SCIENCES: 28/76 (Q2), IF 2.421. DOI: 10.1016/j.atmosres.2012.10.021

3.1.2 Capítulos de libro

- [27] Francisco J Rodríguez Lera, Camino Fernández Llamas, Ángel Manuel Guerrero, and Vicente Matellán Olivera. Cybersecurity of robotics and autonomous systems: Privacy and safety. In George Dekoulis, editor, *Robotics - Legal, Ethical and Socioeconomic Impacts*. IntechOpen, 2017. ISBN 978-953-51-5511-9

3.1.3 Contribuciones en congresos científicos

- [28] Alberto Fernández de Retana, Alberto Miranda-García, Ángel Manuel Guerrero, and Camino Fernández-Llamas. Attacks detection on sampled netflow traffic through image analysis with convolutional neural networks (cnn). In *14th International Conference on Computational Intelligence in Security for Information Systems and 12th International Conference on European Transnational Educational (CISIS 2021 and ICEUTE 2021)*. *Advances in Intelligent Systems and Computing*, vol 1400, pages 33–40. Springer, September 22–24 2021. ISBN 978-3-030-87871-9, DOI 10.1007/978-3-030-87872-6
- [29] Laura Fernández-Becerra, Ángel Manuel Guerrero-Higueras, Francisco Javier Rodríguez-Lera, and Camino Fernández-Llamas. Analysis of the performance of different accountability strategies for autonomous robots. In *14th International Conference on Computational Intelligence in Security for Information Systems and 12th International Conference on European Transnational Educational (CISIS 2021 and ICEUTE 2021)*. *Advances in Intelligent Systems and Computing*, vol 1400, pages 41–51. Springer, September 22–24 2021. ISBN 978-3-030-87871-9, DOI 10.1007/978-3-030-87872-6
- [30] Adrián Campazas-Vega, Ignacio Samuel Crespo-Martínez, Ángel Manuel Guerrero-Higueras, Claudia Álvarez-Aparicio, and Vicente Matellán. Analysis of netflow features' importance in malicious network traffic detection. In *14th International Conference on Computational Intelligence in Security for Information Systems and 12th International Conference on European Transnational Educational (CISIS 2021 and ICEUTE 2021)*. *Advances in Intelligent Systems and Computing*, vol 1400, pages 52–61. Springer, September 22–24 2021. ISBN 978-3-030-87871-9, DOI 10.1007/978-3-030-87872-6
- [31] Verónica Toral-Álvarez, Claudia Álvarez-Aparicio, Ángel Manuel Guerrero-Higueras, and Camino Fernández-Llamas. Gait-based authentication using a rgb camera. In *14th International Conference on Computational Intelligence in Security for Information Systems and 12th International Conference on European Transnational Educational (CISIS 2021 and ICEUTE 2021)*. *Advances in Intelligent Systems and Computing*, vol 1400, pages 126–135. Springer, September 22–24 2021. ISBN 978-3-030-87871-9, DOI 10.1007/978-3-030-87872-6
- [32] M.Á. Conde, F.J. Rodríguez-Sedano, F.J. Rodríguez-Lera, A. Gutiérrez-Fernández, and Á.M. Guerrero-Higueras. WhatsApp or Telegram. Which is the Best Instant Messaging Tool for the Interaction in Teamwork? In *Learning and Collaboration Technologies: New Challenges and Learning Experiences. HCII 2021. Lecture Notes in Computer Science*, vol 12784. Springer, July 2021. ISBN 978-3-030-77888-0, DOI 10.1007/978-3-030-77889-7_16
- [33] Vicente Matellán, Francisco-J Rodríguez-Lera, Ángel-M Guerrero-Higueras, Francisco-Martín Rico, and Jonatan Ginés. The role of cybersecurity and hpc in the explainability of autonomous robots behavior. In *2021 IEEE International Conference on Advanced Robotics and Its Social Impacts (ARSO)*, pages 1–5, On-line, July 8–10 2021. IEEE. ISBN 978-1-6654-4953-3, DOI 10.1109/ARSO51874.2021.9542829
- [34] Gonzalo García-Miranda, Alberto Calvo-García, Claudia Álvarez Aparicio, Ángel Manuel Guerrero-Higueras, Francisco Javier Rodríguez-Lera, and Camino Fernández-Llamas. Entrenamiento optimizado de redes neuronales para reconocimiento biométrico. In *Actas de las VI Jornadas Nacionales de Investigación en Ciberseguridad*, On-line, June 9–10 2021. Universidad de Castilla-La Mancha. ISBN 978-84-9044-463-4, DOI 10.18239/jornadas.2021.34.41
- [35] Francisco Javier Rodríguez-Lera, Miguel Ángel Conde, David Fernández-González, Francisco J Rodríguez-Sedano, Ángel Manuel Guerrero-Higueras, and Camino Fernández Llamas. SUFFER: a Cloud System for Teaching Labs in Distance Education. In *Proceedings of the 22th International Symposium on Computers in Education. CEUR Workshop Proceedings Vol-2733*, On-line, November 9–13 2020. CEUR-WS
- [36] Miguel Ángel Conde-González, Francisco Javier Rodríguez-Lera, David Fernández-González, Francisco J Rodríguez-Sedano, Ángel Manuel Guerrero-Higueras, and Camino Fernández-Llamas. SUFFER – SimUlation Framework for

- Education in Robotics. In *Proceedings of the Eighth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM)*, pages 14–17, Salamanca, Castilla y León, España, 21–23 October 2020. ACM. ISBN 978-1-4503-8850-4, DOI 10.1145/3434780.3436702
- [37] Francisco Javier Rodríguez-Lera, Miguel Ángel González Santamarta, Ángel Manuel Guerrero, Francisco Martín, and Vicente Matellán. Traceability and Accountability in Autonomous Agents. In *13th International Conference on Computational Intelligence in Security for Information Systems (CISIS 2020). Advances in Intelligent Systems and Computing, vol 1267*, pages 295–305, Burgos, Castilla y León, España, 16–18 September 2020. Springer. ISBN 978-3-030-57804-6, DOI 10.1007/978-3-030-57805-3_28
- [38] Laura Fernández-Becerra, David Fernández González, Ángel Manuel Guerrero-Higueras, Francisco Javier Rodríguez Lera, and Camino Fernández-Llamas. Cybersecurity Overview of a Robot as a Service Platform. In *13th International Conference on Computational Intelligence in Security for Information Systems (CISIS 2020). Advances in Intelligent Systems and Computing, vol 1267*, pages 132–141, Burgos, Castilla y León, España, 16–18 September 2020. Springer. ISBN 978-3-030-57804-6, DOI 10.1007/978-3-030-57805-3_13
- [39] David Sobrín-Hidalgo, Adrián Campazas-Vega, Ángel Manuel Guerrero-Higueras, Francisco Javier Rodríguez-Lera, and Camino Fernández-Llamas. Systematic Mapping of Detection Techniques for Advanced Persistent Threats. In *13th International Conference on Computational Intelligence in Security for Information Systems (CISIS 2020). Advances in Intelligent Systems and Computing, vol 1267*, pages 426–435, Burgos, Castilla y León, España, 16–18 September 2020. Springer. ISBN 978-3-030-57804-6, DOI 10.1007/978-3-030-57805-3_40
- [40] Claudia Álvarez Aparicio, Jonatan Ginés Clavero, Miguel Ángel González-Santamarta, Francisco Martín Rico, Ángel Manuel Guerrero-Higueras, Francisco Javier Rodríguez-Lera, and Vicente Matellán. Using HPC as a competitive advantage in an international robotics challenge? In *Nesmachnow S., Castro H., Tchernykh A. (eds) High Performance Computing. CARLA 2020. Communications in Computer and Information Science, vol 1327*, Cuenca, Ecuador, 2–4 September 2020. Springer. ISBN 978-3-030-68034-3, DOI 10.1007/978-3-030-68035-0_8
- [41] Francisco Javier Rodríguez-Lera, Ángel Manuel Guerrero-Higueras, Francisco Martín-Rico, Jonathan Gines, Juan Felipe García Sierra, and Vicente Matellán-Olivera. Adapting ROS Logs to Facilitate Transparency and Accountability in Service Robotics. In *Fourth Iberian Robotics Conference. ROBOT 2019. Advances in Intelligent Systems and Computing, vol 1093*, pages 587–598, Oporto, Portugal, 20–22 November 2019. Springer. ISBN 978-3-030-36149-5, DOI 10.1007/978-3-030-36150-1_48
- [42] Ángel Manuel Guerrero-Higueras, Lidia Sánchez-González, Camino Fernández-Llamas, Miguel Ángel Conde, Francisco J Rodríguez Lera, Francisco J Rodríguez Sedano, Gonzalo Esteban Costales, and Vicente Matellán. Prediction of academic success through interaction with version control systems. In *Proceedings of the Seventh International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM)*, pages 284–289, León, Castilla y León, España, 16–18 October 2019. ACM. ISBN 978-1-4503-7191-9
- [43] Bence Ferdinandy, Ángel Manuel Guerrero-Higueras, Éva Verderber, Ádám Miklósi, and Vicente Matellán. Analysis of users' first contact with High-Performance Computing: first approach with ethology researchers. In *Proceedings of the Seventh International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM)*, pages 554–557, León, Castilla y León, España, 16–18 October 2019. ACM. ISBN 978-1-4503-7191-9
- [44] Ángel Manuel Guerrero-Higueras, Lidia Sánchez-González, Miguel Ángel Conde-González, Francisco J Rodríguez-Lera, Manuel Castejón-Limas, and Nicolai Petkov. Facilitating the learning process in parallel computing by using instant messaging. In *Proceedings of the Seventh International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM)*, León, Castilla y León, España, 16–18 October 2019. ACM. ISBN 978-1-4503-7191-9
- [45] Miguel Á Conde, Francisco J Rodríguez-Sedano, Francisco J Rodríguez-Lera, Alexis Gutiérrez-Fernández, and Ángel M Guerrero-Higueras. Analyzing students' WhatsApp messages to evaluate the individual acquisition of teamwork competence. In *Learning and Collaboration Technologies. Ubiquitous and Virtual Environments for Learning and Collaboration. HCII 2019. Lecture Notes in Computer Science, vol 11591*, pages 26–36. Springer, 26–31 July 2019. ISBN 978-3-030-21816-4, DOI 10.1007/978-3-030-21817-1_3
- [46] Claudia Álvarez Aparicio, Ángel Manuel Guerrero-Higueras, Francisco Javier Rodríguez-Lera, Jonatan Ginés-Clavero, Francisco Martín-Rico, and Vicente Matellán. Detección y seguimiento de personas utilizando sensores lidar. In *Jornadas Nacionales de Robótica*, pages 234–240, Alicante, Comunidad Valenciana, España, 13–14 June 2019. Comité Español de Automática (CEA). ISBN 978-84-09-12133-5
- [47] Gonzalo Esteban, Razvan Raducu, Ángel Manuel Guerrero-Higueras, and Camino Fernández Llamas. Cómo representar un Buffer Overflow: una revisión literaria sobre sus características. In *Actas de las V Jornadas Nacionales de Ciberseguridad*, pages 336–343, Cáceres, Extremadura, España, 5–7 June 2019. ISBN 978-84-09-12121-2

- [48] Jonatan Gines Clavero, Francisco J Rodríguez, Francisco Martín Rico, Angel Manuel Guerrero, and Vicente Matellán. Using Probabilistic Context Awareness in a Deliberative Planner System. In *8th International Work-Conference on the Interplay Between Natural and Artificial Computation (IWINAC)*, pages 157–166, Almería, Andalucía, España, 3–7 June 2019. Springer. ISBN 978-3-030-19650-9, DOI 10.1007/978-3-030-19651-6_16
- [49] Claudia Álvarez Aparicio, Ángel M Guerrero-Higueras, Francisco J Rodríguez-Lera, M Carmen Calvo Olivera, Vicente Matellán Olivera, Jonatan Ginés Clavero, and Francisco Martín Rico. LIDAR-based People Detection and Tracking for@ home Competitions. In *19th IEEE International Conference on Autonomous Robot Systems and Competitions (ICARSC 2019)*, pages 1–6, Gondomar, Oporto, Portugal, 24-26 April 2019. IEEE. ISBN 978-1-7281-3557-1, DOI 10.1109/ICARSC.2019.8733624
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