

## **Building Efficient Smart Cities**

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Current technological developments offer promising solutions to the challenges faced by cities such as crowding, pollution, housing, the search for greater comfort, better healthcare, optimized mobility and other urban services that must be adapted to the fast-paced life of the citizens. Cities that deploy technology to optimize their processes and infrastructure fit under the concept of a smart city. An increasing number of cities strive towards becoming smart and some are even already being recognized as such, including Singapore, London and Barcelona.

Our society has an ever-greater reliance on technology for its sustenance. This will continue into the future, as technology is rapidly penetrating all facets of human life, from daily activities to the workplace and industries. A myriad of data is generated from all these digitized processes, which can be used to further enhance all smart services, increasing their adaptability, precision and efficiency. However, dealing with large amounts of data coming from different types of sources is a complex process; this impedes many cities from taking full advantage of data, or even worse, a lack of control over the data sources may lead to serious security issues, leaving cities vulnerable to cybercrime. Given that smart city infrastructure is largely digitized, a cyberattack would have fatal consequences on the city's operation, leading to economic loss, citizen distrust and shut down of essential city services and networks. This is a threat to the efficiency smart cities strive for.

Building an efficient smart city must therefore start with using a robust and secure data management system which is going to enable governments to rapidly extract valuable information and use it to enhance the technology deployed in a smart city. The Deep Intelligence platform or Deepint.net for short, has been designed precisely for this purpose. The efficiency of this tool greatly contributes to creating efficient smart city management.

Smart cities implement technology in all areas of city life. For example, within mobility, there may be areas such as Transportation Control, Logistics Planning, Traffic Control, Crowd Management. To achieve efficiency in all these areas, it is necessary that they be dedicated equal amount of attention. However, given their vastness, certain issues may be easy to overlook if proper management is not established. Deepint.net addresses this problem through its modular design, enabling the city's government to divide all city services into separate modules on the platform. This facilitates the analysis of data and the attainment of a clear picture of the state of each service, identifying the possible improvements to be made or problems to be solved. Nevertheless, it is also possible to analyse the relationships between the different city services, as the tool's centralized Management Platform makes it possible for the modules to exchange data.

In addition, the modular design makes Deepint.net scalable, which is essential for efficient smart city management, given that cities are dynamic and rapidly developing environments. As new city services are created it must be possible to easily include them in the city's management system. Deepint.net makes it possible to eliminate, modify or add new modules, without having to disintegrate the entire smart city management structure. The swiftness of this process means that smart city management and development become easier.

Furthermore, some cities may already be using some sort of Smart City or Internet of Things platform for data governance. If they wish to enhance their management capabilities with Deepint.net, they may do so without having to take down their other infrastructure. Instead, they may integrate Deepint.net with their current platform, as Deepint.net has a large part of the connectors needed for this purpose.

Deepint has been designed for use by smart city governments. It incorporates a wizard which assists the platform user in processes such as data ingestion, management, creation of AI models (random forest, neural networks, etc.), analysis, visualization and exportation, so much so that it can even be operated by users who have no experience in data analysis, machine learning or artificial intelligence. This entails considerable savings both time- and money-wise.

Thus, ease of use, ease of integration with other platforms, modularity and scalability all contribute to efficient smart city management.

#### References:

- Abdullah Talha Kabakus (2019) An Experimental Performance Comparison of Widely Used Face Detection Tools. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 8, n. 3, 5-12.
- Abraham, Ajith, Emilio Corchado, and Juan M. Corchado. (2009). Hybrid learning machines.
- Adrián Valera-Román, Diego Mateos-Matilla, Eduardo Oliva-Rubio, Álvaro Paule-Pereda (2019) Multi-Agent Vehicle Share System. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 8, n. 1, 27-35.
- Afreen Khan, Swaleha Zubair, Samreen Khan (2021) Comprehensive Performance Analysis of Neurodegenerative disease Incidence in the Females of 60-96 year Age Group. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 10, n. 2.
- Akshansh Mishra (2020) Local binary pattern for the evaluation of surface quality of dissimilar friction stir welded ultrafine grained 1050 and 6061-t6 aluminium alloys. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 2, 69-77.
- Akshansh Mishra, Anusri Patti (2021) Deep Convolutional Neural Network Modeling and Laplace Transformation Algorithm for the Analysis of Surface Quality of Friction Stir Welded Joints. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 10, n. 3, 307-320.

- Akshansh Mishra, Devarrishi Dixit (2021) Brain Inspired Computing Approach for the Optimization of the Thin Film Thickness of Polystyrene on the Glass Substrates. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 10, n. 3, 267-279.
- Akshansh Mishra, Tarushi Pathak (2021) Estimation of Grain Size Distribution of Friction Stir Welded Joint by using Machine Learning Approach. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 10, n. 1, 99-110.
- Alberto Botana López (2019) Deep Learning in Biometrics: A Survey. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 8, n. 4, 19-32.
- Alberto Rivas, Jesús M. Fraile, Pablo Chamoso, Alfonso González-Briones, Sara Rodríguez, Juan M. Corchado (2019) Students Performance Analysis Based on Machine Learning Techniques. LTEC 2019: 428-438
- Alberto Rivas, Jesús M. Fraile, Pablo Chamoso, Alfonso González-Briones, Inés Sittón, Juan M. Corchado (2019) A Predictive Maintenance Model Using Recurrent Neural Networks. SOCO 2019: 261-270
- Alberto Rivas, Pablo Chamoso, Alfonso González-Briones, Juan Pavón, Juan M. Corchado (2020) Social Network Recommender System, A Neural Network Approach. IDEAL (2) 213-222
- Alda Canito, Daniel Mota, Goreti Marreiros, Juan M. Corchado, Constantino Martins (2020) Contextual Adaptive Interfaces for Industry 4.0. DCAI (Special Sessions) 2020: 149-157
- Alda Canito, Gabriel Santos, Juan M. Corchado, Goreti Marreiros, Zita A. Vale (2019) Semantic Web Services for Multi-Agent Systems Interoperability. EPIA (2) 2019: 606-616
- Alda Canito, Goreti Marreiros, Juan Manuel Corchado (2019) Automatic Document Annotation with Data Mining Algorithms. WorldCIST (1) 2019: 68-76
- Alda Canito, Juan M. Corchado, Goreti Marreiros (2021) Bridging the Gap Between Domain Ontologies for Predictive Maintenance with Machine Learning. WorldCIST (2) 2021: 533-543
- Alda Canito, Juan M. Corchado, Goreti Marreiros: Bridging the Gap Between Domain Ontologies for Predictive Maintenance with Machine Learning. WorldCIST (2) 2021: 533-543
- Alfonso González (2020) Fintech and Tokenization: A legislative study in Argentina and Spain about the application of Blockchain in the field of properties. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 1, 51-59.
- Alfonso González-Briones, Javier Prieto, Fernando de la Prieta, Yves Demazeau, Juan M. Corchado: Virtual agent organizations for user behaviour pattern extraction in energy optimization processes: A new perspective. Neurocomputing 452: 374-385 (2021)
- Alfonso González-Briones, Javier Prieto, Fernando de la Prieta, Yves Demazeau, Juan M. Corchado: Virtual agent organizations for user behaviour pattern extraction in energy optimization processes: A new perspective. Neurocomputing 452: 374-385
- Alfonso González-Briones, Roberto Garcia-Martin, Francisco Lecumberri de Alba, Juan M. Corchado (2020) Agent-Based Platform for Monitoring the Pressure Status of Fire Extinguishers in a Building. PAAMS (Workshops) 2020: 373-384
- Alfonso González-Briones, Yeray Mezquita Martín, José A. Castellanos-Garzón, Javier Prieto, Juan M. Corchado (2019) Intelligent multi-agent system for water reduction in automotive irrigation processes. ANT/EDI40 2019: 971-976

- Ali Wided, Kazar Okba, Bouakkaz Fatima (2019) Load balancing with Job Migration Algorithm for improving performance on grid computing: Experimental Results. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 8, n. 4, 5-18.
- Altaf Hussain, Tariq Hussain, Iqtidar Ali, Muhammad Rafiq Khan (2020) Impact of Sparse and Dense Deployment of Nodes Under Different Propagation Models in Manets. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 1, 61-84.
- Álvaro Martín, David Trejo, Alejandro Yagüe, José Sánchez (2019) Multi-agent system for selecting images based on the gender and age. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 8, n. 1, 49-54.
- AMIT PURUSHOTTAM Pimpalkar, R. Jeberson Retna Raj (2020) Influence of Pre-Processing Strategies on the Performance of ML Classifiers Exploiting TF-IDF and BOW Features. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 2, 49-68.
- Angel Canal-Alonso, Roberto Casado-Vara, Juan Manuel Corchado (2020) An affordable implantable VNS for use in animal research. ICECS 2020: 1-4
- Anibal Reñones, Marta Galende (2020) F.A.I.R. open dataset of brushed DC motor faults for testing of AI algorithms. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 4, 83-94.
- Ant3nio C R Costa (2020) Elements for the Agent-Based Modeling of Slavery Systems. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 1, 15-27.
- Antonio J. Sánchez, Elena Hernández Nieves, Fernando de la Prieta, Juan Manuel Corchado, Sara Rodríguez (2019) Describing Interfaces in the Framework of Adaptive Interface Ecosystems. EPIA (2) 2019: 38-49
- Aparna V (2020) Application of DCS for Level Control in Nonlinear System using Optimization and Robust Algorithms. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 1, 29-50.
- Areej Alshutayria, Nahla Aljojo, Basma Alharbia, Ameen Banjarb, Atheer Alshehria, Mashaiel Alargoubia, Ola Barradha, Rahaf Helabia (2021) An Interactive Mobile Application to Request the Help of the Nearest First Aider by the Injured The Design and Implementation of an Interactive Mobile Application to request the help of the nearest first aider by the injured. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 10, n. 1, 15-32.
- Aria Jozi, Tiago Pinto, Isabel Praça, Francisco Silva, Brigida Teixeira, Zita Val (2019) Genetic fuzzy rule-based system using MOGUL learning methodology for energy consumption forecasting. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 8, n. 1, 55-64.
- Arya Tanmay Gupta, Himani Gupta, Muskan Sharma, Priyanka Khanna (2020) A secure home automation prototype built on raspberry-pi. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 2
- Aversa, Raffaella, et al. "Kinematics and forces to a new model forging manipulator." *American Journal of Applied Sciences* 14.1 (2017): 60-80.
- Bardos, C., Catto, I., Mauser, N. J., & Trabelsi, S. (2009). Global-in-time existence of solutions to the multiconfiguration time-dependent Hartree–Fock equations: A sufficient condition. *Applied Mathematics Letters*, 22(2), 147-152.
- Baruque, Bruno, et al. "A forecasting solution to the oil spill problem based on a hybrid intelligent system." *Information Sciences* 180.10 (2010): 2029-2043.

- Bessaih, H., Trabelsi, S., & Zorgati, H. (2016). Existence and uniqueness of global solutions for the modified anisotropic 3D Navier– Stokes equations. *ESAIM: Mathematical Modelling and Numerical Analysis*, 50(6), 1817-1823.
- Borrajo, M. Lourdes, et al. "Autonomous internal control system for small to medium firms." *International Conference on Case-Based Reasoning*. Springer, Berlin, Heidelberg, 2005.
- Brigida Teixeira, Gabriel Santos, Tiago Pinto, Zita A. Vale, Juan M. Corchado (2020) Application Ontology for Multi-Agent and Web-Services' Co-Simulation in Power and Energy Systems. *IEEE Access* 8: 81129-81141
- Budor Alharbi, Fatmah Assiri, Basma Alharbi (2021) A Comparative Study of Student Performance Prediction using Pre-Course Data. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 10, n. 1, 49-61.
- Canito, A., Corchado, J., & Marreiros, G. (2021) Bridging the Gap Between Domain Ontologies for Predictive Maintenance with Machine Learning. In *Trends and Applications in Information Systems and Technologies: Volume 2 9* (pp. 533-543). Springer International Publishing .
- Canito, A., Corchado, J., & Marreiros, G.: Bridging the Gap Between Domain Ontologies for Predictive Maintenance with Machine Learning. In *Trends and Applications in Information Systems and Technologies: Volume 2 9* (pp. 533-543). Springer International Publishing (2021).
- Carlos Lopez-Castaño , Luis Fernando Castillo , Juan M. Corchado : Discovering the Value Creation System in IoT Ecosystems. *Sensors* 21(2): 328 (2021)
- Carlos Lopez-Castaño , Luis Fernando Castillo , Juan M. Corchado (2021) Discovering the Value Creation System in IoT Ecosystems. *Sensors* 21(2): 328
- Carlos Silva, Juliano Weber, Bruno Belloni (2019) Segmentation and detection of cattle branding images using CNN and SVM classification. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 2, 19-32.
- Carrión, Pilar, et al. "Knowledge Management with an Agent Network." *LANOMS*. 1999.
- Casado-Vara, R., Martín del Rey, A., Pérez-Palau, D., de-la-Fuente-Valentín, L., & Corchado, J. M.: Web Traffic Time Series Forecasting Using LSTM Neural Networks with Distributed Asynchronous Training. *Mathematics*, 9(4), 421 (2021)
- Casado-Vara, R., Martín del Rey, A., Pérez-Palau, D., de-la-Fuente-Valentín, L., & Corchado, J. M.: Web Traffic Time Series Forecasting Using LSTM Neural Networks with Distributed Asynchronous Training. *Mathematics*, 9(4), 421
- Castillo Ossa, L. F., Chamoso, P., Arango-López, J., Pinto-Santos, F., Isaza, G. A., Santa-Cruz-González, C., ... & Corchado, J. M.: A Hybrid Model for COVID-19 Monitoring and Prediction. *Electronics*, 10(7), 799 (2021)
- Castillo Ossa, L. F., Chamoso, P., Arango-López, J., Pinto-Santos, F., Isaza, G. A., Santa-Cruz-González, C., ... & Corchado, J. M. (2021) A Hybrid Model for COVID-19 Monitoring and Prediction. *Electronics*, 10(7), 799
- Chamoso, Pablo, et al. "Social computing in currency exchange." *Knowledge and Information Systems* 61.2 (2019): 733-753.
- Chamoso, Pablo, et al. "Tendencies of technologies and platforms in smart cities: a state-of-the-art review." *Wireless Communications and Mobile Computing* 2018 (2018).
- Cho, Y., Fall, M. M., Hajaiej, H., Markowich, P. A., & Trabelsi, S. (2017). Orbital stability of standing waves of a class of fractional Schrödinger equations with Hartree-type nonlinearity. *Analysis and Applications*, 15(05), 699-729.

- Cho, Y., Fall, M. M., Hajaiej, H., Markowich, P. A., & Trabelsi, S. (2013). Orbital stability of standing waves of a class of fractional Schrodinger equations with a general Hartree-type integrand. *arXiv preprint arXiv:1307.5523*.
- Choon, Yee Wen, et al. "Differential bees flux balance analysis with OptKnock for in silico microbial strains optimization." *PloS one* 9.7 (2014): e102744.
- Corchado, E. S., Juan M. Corchado, and Jim Aiken. "Ibr retrieval method based on topology preserving mappings." *Journal of Experimental & Theoretical Artificial Intelligence* 16.3 (2004): 145-160.
- Corchado, Emilio S., et al. "A beta-cooperative cbr system for constructing a business management model." *Industrial Conference on Data Mining*. Springer, Berlin, Heidelberg, 2004.
- Corchado, Emilio, et al. "Constructing a global and integral model of business management using a cbr system." *International Conference on Cooperative Design, Visualization and Engineering*. Springer, Berlin, Heidelberg, 2004.
- Corchado, J. "Cbr systems, an overview." *International Conference on Intelligent Systems. London, England, Uk*. 1995.
- Corchado, J. "Real time forecast with intelligent systems." *Conference on Knowledge Discovery. IEE, Savoy Place, London*. 1998.
- Corchado, J. M. "A distributed recommendation system assos." *IEEE COLLOQUIUM ON KNOWLEDGE DISCOVERY. IEE, LONDON, UK*. 1995.
- Corchado, J. M. "Artificial intelligence models: composed systems as a solution." *IEEE COLLOQUIUM ON KNOWLEDGE DISCOVERY. LONDON ENGLAND, UK*. 1996.
- Corchado, J. M. "Bdi multiagent hybrid architecture for project management." *IEEE Colloquium On Knowledge Discovery And Data Mining. London England*. 1997.
- Corchado, J. M. "Case based reasoning systems: automatic construction." *INTERNATIONAL CONFERENCE ON INTELLIGENT SYSTEMS. LONDON ENGLAND UK*. 1995.
- Corchado, J. M. "Hybrid cbr system for real-time temperature forecasting in the ocean." *IEEE COLLOQUIUM ON KNOWLEDGE DISCOVERY. LONDON, UK*. 1995.
- Corchado, J. M. "Models for integrating artificial intelligence approaches." *Doctoral Consortium On Knowledge Discovery And Data Mining. Paisley, UK* (1998).
- Corchado, J. M. "Multi agent tools: a case study." *IEEE COLLOQUIUM ON KNOWLEDGE DISCOVERY. LONDON ENGLAND, UK*. 1995.
- Corchado, J. M. "Neuro-symbolic reasoning-a solution for complex problemas." *INTERNATIONAL CONFERENCE ON INTELLIGENT SYSTEMS. LONDON, UK*. 1995.
- Corchado, J. M. "Real time forecast with intelligent systems: Cbrs and anns." *Workshop On Artificial Neural Networks. Aberdeen*. 1997.
- Corchado, J. M. "System for decision making: a practical case." *Conference On Knowledge Discovery And Data Mining. Iee, London, UK*. 1997.
- Corchado, J. M. "The use of kernel methods in cbr systems." *INTERNATIONAL CONFERENCE ON INTELLIGENT SYSTEMS. LONDON ENGLAND UK*. 1995.
- Corchado, J. M., and B. Lees. "Case-base reasoning recommendation system." *IEEE COLLOQUIUM ON KNOWLEDGE DISCOVERY. LONDON, UK*. 1996.
- Corchado, J. M., and B. Lees. "Cognitive models for integrating artificial intelligence approaches." *All Workshop On Knowledge Discovery. Glasgow, UK*. 1998.
- Corchado, J. M., and B. Lees. "Integration ai models." *Workshop On Knowledge Discovery And Data Mining. Pml-Nerc, Plymouthlondon, UK*. 1998.
- Corchado, J. M., and B. Lees. "Probis: Modelling intelligence with hybrid systems." *Workshop On Data Mining. University of Glasgow, Scotland, UK*. 1998.
- Corchado, J. M., and J. Aiken. "Expert system for modelling water masses." *Workshop On Data Mining. Glasgow, Scotland*. 1998.
- Corchado, J. M., and J. Aiken. "Neuro-symbolic reasoning for real time oceanographic problems." *Conference On Data Mining. IEE, Savoy Place, London*. 1998.
- Corchado, J. M., B. Lees, and C. Fyfe. "Project monitoring intelligent agent system." (1997): 4-4.

- Corchado, J. M., et al. "Data mining using example-based methods in oceanographic forecast models." (1998): 7-7.
- Corchado, J., and B. Lees. "An overview of intelligent frameworks." *Colloquium On Intelligent Systems. Iee, London, UK.* 1998.
- Corchado, J., and B. Lees. "Artificial neural networks in pattern recognition: multicollinearity and heterocedasticity." *Colloquium On Knowledge Discovery. LONDON, UK.* 1998.
- Corchado, J., and B. Lees. "Case based reasoning opportunities and technologies." *Conference On Knowledge Discovery. IEE, Savoy Place, London.* 1998.
- Corchado, J., Colin Fyfe, and Brian Lees. "Unsupervised learning for financial forecasting." *Proceedings of the IEEE/IAFE/INFORMS 1998 Conference on Computational Intelligence for Financial Engineering (CIFEr)(Cat. No. 98TH8367).* IEEE, 1998.
- Corchado, Juan M. "Adaptive hybrid system architecture for forecasting." *Proceedings of the fourteenth national conference on artificial intelligence and ninth conference on Innovative applications of artificial intelligence.* 1997.
- Corchado, Juan M., and Brian Lees. "A hybrid case-based model for forecasting." *Applied Artificial Intelligence* 15.2 (2001): 105-127.
- Corchado, Juan M., and Brian Lees. "Adaptation of cases for case based forecasting with neural network support." *Soft computing in case based reasoning.* Springer, London, 2001. 293-319.
- Corchado, Juan M., and Colin Fyfe. "Unsupervised neural method for temperature forecasting." *Artificial Intelligence in Engineering* 13.4 (1999): 351-357.
- Corchado, Juan M., and Jim Aiken. "Hybrid artificial intelligence methods in oceanographic forecast models." *IEEE Transactions on Systems, Man, and Cybernetics, Part C (Applications and Reviews)* 32.4 (2002): 307-313.
- Corchado, Juan M., and Rosalía Laza. "Constructing deliberative agents with case-based reasoning technology." *International Journal of Intelligent Systems* 18.12 (2003): 1227-1241.
- Corchado, Juan M., Brian Lees, and N. Rees. "A multi-agent system "test bed" for evaluating autonomous agents." *Proceedings of the first international conference on Autonomous agents.* 1997.
- Corchado, Juan M., Emilio S. Corchado, and María A. Pellicer. "Design of cooperative agents for mobile devices." *International Conference on Cooperative Design, Visualization and Engineering.* Springer, Berlin, Heidelberg, 2004.
- Corchado, Juan M., et al. "Agent-based web engineering." *International Conference on Web Engineering.* Springer, Berlin, Heidelberg, 2003.
- Corchado, Juan M., et al. "Development of CBR-BDI agents: a tourist guide application." *European Conference on Case-based Reasoning.* Springer, Berlin, Heidelberg, 2004.
- Corchado, Juan M., et al. "Evaluating the air-sea interactions and fluxes using an instance-based reasoning system." *AI Communications* 18.4 (2005): 247-256.
- Corchado, Juan M., et al. "Maximum likelihood hebbian learning based retrieval method for cbr systems." *International Conference on Case-Based Reasoning.* Springer, Berlin, Heidelberg, 2003.
- Corchado, Juan M., et al. "Neuro-symbolic system for business internal control." *Industrial Conference on Data Mining.* Springer, Berlin, Heidelberg, 2004.
- Corchado, Juan M., et al. "Quantifying the ocean's co2 budget with a cohel-ibr system." *European Conference on Case-Based Reasoning.* Springer, Berlin, Heidelberg, 2004.
- Corchado, Juan M., et al. "Study and comparison of multilayer perceptron nn and radial basis function nn in oceanographic forecasting." *Applications and Science of Artificial Neural Networks III.* Vol. 3077. International Society for Optics and Photonics, 1997.
- Coria, José A. García, José A. Castellanos-Garzón, and Juan M. Corchado. "Intelligent business processes composition based on multi-agent systems." *Expert Systems with Applications* 41.4 (2014): 1189-1205.
- Costa, Ângelo, et al. "Increased performance and better patient attendance in an hospital with the use of smart agendas." *Logic Journal of IGPL* 20.4 (2012): 689-698.

- Daniel López Sánchez, Angélica González Arrieta, Juan M. Corchado (2020) Compact bilinear pooling via kernelized random projection for fine-grained image categorization on low computational power devices. *Neurocomputing* 398: 411-421
- David Berrocal-Macías, Zakieh Alizadeh-Sani, Francisco Pinto-Santos, Alfonso González-Briones, Pablo Chamoso, Juan M. Corchado: Services Extraction for Integration in Software Projects via an Agent-Based Negotiation System. *PAAMS (Workshops) 2021: 241-252*
- David Berrocal-Macías, Zakieh Alizadeh-Sani, Francisco Pinto-Santos, Alfonso González-Briones, Pablo Chamoso, Juan M. Corchado (2021) Services Extraction for Integration in Software Projects via an Agent-Based Negotiation System. *PAAMS (Workshops) 2021: 241-252*
- David García-Retuerta, Álvaro Bartolomé, Pablo Chamoso, Juan M. Corchado, Alfonso González-Briones (2019) Original Content Verification Using Hash-Based Video Analysis. *ISAmI 2019: 120-127*
- David García-Retuerta, Angel Canal-Alonso, Roberto Casado-Vara, Ángel Martín del Rey, Gabriella Panuccio, Juan M. Corchado (2020) Bidirectional-Pass Algorithm for Interictal Event Detection. *PACBB 2020: 197-204*
- David García-Retuerta, Juan M. Corchado (2021) Gamification Proposal of an Improved Energy Saving System for Smart Homes. *SSCT 2021: 315-317*
- David García-Retuerta, Juan M. Corchado: Gamification Proposal of an Improved Energy Saving System for Smart Homes. *SSCT 2021: 315-317*
- David García-Retuerta, Roberto Casado-Vara, Ángel Martín del Rey, Fernando de la Prieta, Javier Prieto, Juan M. Corchado (2020) Quaternion Neural Networks: State-of-the-Art and Research Challenges. *IDEAL (2) 2020: 456-467*
- David García-Retuerta, Roberto Casado-Vara, Diego Valdeolmillos, Juan M. Corchado: A Reputation Score Proposal for Online Video Platforms. *EPIA 2021: 255-265*
- David García-Retuerta, Roberto Casado-Vara, Diego Valdeolmillos, Juan M. Corchado (2021) A Reputation Score Proposal for Online Video Platforms. *EPIA 2021: 255-265*
- De Blas, J. C., et al. "Effect of diet on feed intake and growth of rabbits from weaning to slaughter at different ages and weights." *Journal of Animal Science* 52.6 (1981): 1225-1232.
- Denisa Reshef Kera, Petr Sourek, Mateusz Krainski, Yair Reshef, Juan Manuel Corchado Rodríguez, Iva Magdalena Knobloch (2019) Lithopia: Prototyping Blockchain Futures. *CHI Extended Abstracts 2019*
- Díaz, Fernando, et al. "Using fuzzy patterns for gene selection and data reduction on microarray data." *International Conference on Intelligent Data Engineering and Automated Learning*. Springer, Berlin, Heidelberg, 2006.
- Díaz, Fernando, Florentino Fdez-Riverola, and Juan M. Corchado. "gene-CBR: A CASE-BASED REASONING TOOL FOR CANCER DIAGNOSIS USING MICROARRAY DATA SETS." *Computational Intelligence* 22.3-4 (2006): 254-268.
- Diego Valdeolmillos, Roberto Casado-Vara, Juan M. Corchado (2020) EdgeChain to provide security in organization-based multi-agent systems. *Blockchains for Network Security 2020: 175-187*
- Diego Valdeolmillos, Yeray Mezquita Martín, Alfonso González-Briones, Javier Prieto, Juan Manuel Corchado (2019) Blockchain Technology: A Review of the Current Challenges of Cryptocurrency. *BLOCKCHAIN 2019: 153-160*
- Diego Vergara, Jamil Extremera, Manuel Pablo Rubio, Lilian P. Dávila (2020) The proliferation of virtual laboratories in educational fields. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 9, n. 1, 85-97.



- Diogo Martinho, João Carneiro, José Neves, Paulo Novais, Juan M. Corchado, Goreti Marreiros: A Reinforcement Learning Approach to Improve User Achievement of Health-Related Goals. *EPIA 2021*: 266-277
- Diogo Martinho, João Carneiro, José Neves, Paulo Novais, Juan M. Corchado, Goreti Marreiros (2021) A Reinforcement Learning Approach to Improve User Achievement of Health-Related Goals. *EPIA 2021*: 266-277
- Diogo Martinho, João Carneiro, Juan M. Corchado, Goreti Marreiros (2020) A systematic review of gamification techniques applied to elderly care. *Artif. Intell. Rev.* 53(7): 4863-4901
- Diogo Martinho, João Carneiro, Paulo Novais, José Neves, Juan M. Corchado, Goreti Marreiros (2019) A Conceptual Approach to Enhance the Well-Being of Elderly People. *EPIA (2) 2019*: 50-61
- Duygu Sinanc, Umut Demirezen, Şeref Sağıroğlu (2021) Explainable Credit Card Fraud Detection with Image Conversion. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863)*, Salamanca, v. 10, n. 1, 63-76.
- Ebru Pekel Özmen, Engin Pekel (2019) Estimation of Number of Flight Using Particle Swarm Optimization and Artificial Neural Network. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863)*, Salamanca, v. 8, n. 3, 27-33.
- Eduardo Facchini, Eduardo Mario Dias (2019) The importance of development of control processes and methods for urban bus services. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863)*, Salamanca, v. 8, n. 3, 51-65.
- Elena Hernández Nieves, Álvaro Bartolomé del Canto, Pablo Chamoso-Santos, Fernando de la Prieta Pintado, Juan M. Corchado Rodríguez (2020) A Machine Learning Platform for Stock Investment Recommendation Systems. *DCAI 2020*: 303-313
- Elena Hernández Nieves, Guillermo Hernández, Ana B. Gil González, Sara Rodríguez-González, Juan M. Corchado: CEBRA: A Case-Based Reasoning Application to recommend banking products. *Eng. Appl. Artif. Intell.* 104: 104327 (2021)
- Elena Hernández Nieves, Guillermo Hernández, Ana B. Gil González, Sara Rodríguez-González, Juan M. Corchado: CEBRA (2021) A Case-Based Reasoning Application to recommend banking products. *Eng. Appl. Artif. Intell.* 104: 104327
- Elena Hernández Nieves, Guillermo Hernández, Ana Belén Gil González, Sara Rodríguez-González, Juan M. Corchado (2020) Fog computing architecture for personalized recommendation of banking products. *Expert Syst. Appl.* 140
- Emilio J. Sánchez, Francisco Jaramago, Manuel López (2019) Virtual agent organizations to optimize energy consumption in households. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863)*, Salamanca, v. 8, n. 1, 37-47.
- Emmanuel Savio Silva Freire, Mariela Inés Cortés, Robert Marinho Da Rocha Júnior, Ênyo José (2019) NorMAS-ML: Supporting the Modeling of Normative Multi-agent Systems. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863)*, Salamanca, v. 8, n. 4, 49-81.
- Ersin Aytac (2021) Forecasting Turkey's Hazelnut Export Quantities with Facebook's Prophet Algorithm and Box-Cox Transformation. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863)*, Salamanca, v. 10, n. 1, 33-47.
- Faia, R., Lezama, F., & Corchado, J. M. . Local electricity markets—practical implementations. In *Local Electricity Markets* (pp. 127-140). Academic Press.

- Faia, R., Lezama, F., & Corchado, J. M. (2021). Local electricity markets—practical implementations. In *Local Electricity Markets* (pp. 127-140). Academic Press.
- Faia, R., Pinto, T., Lezama, F., Vale, Z., & Corchado, J. M. (2021) Optimisation for Coalitions Formation Considering the Fairness in Flexibility Market Participation. In *E3S Web of Conferences* (Vol. 239, p. 00016). EDP Sciences
- Faia, R., Pinto, T., Lezama, F., Vale, Z., & Corchado, J. M.: Optimisation for Coalitions Formation Considering the Fairness in Flexibility Market Participation. In *E3S Web of Conferences* (Vol. 239, p. 00016). EDP Sciences (2021)
- Faia, R., Pinto, T., Vale, Z., & Corchado, J. M. (2021) Portfolio optimization of electricity markets participation using forecasting error in risk formulation. *International Journal of Electrical Power & Energy Systems*, 129, 106739
- Faia, R., Pinto, T., Vale, Z., & Corchado, J. M. (2021) Prosumer Community Portfolio Optimization via Aggregator: The Case of the Iberian Electricity Market and Portuguese Retail Market. *Energies*, 14(13), 3747.
- Faia, R., Pinto, T., Vale, Z., & Corchado, J. M. (2021). Prosumer Community Portfolio Optimization via Aggregator: The Case of the Iberian Electricity Market and Portuguese Retail Market. *Energies*, 14(13), 3747.
- Faia, R., Pinto, T., Vale, Z., & Corchado, J. M.: Portfolio optimization of electricity markets participation using forecasting error in risk formulation. *International Journal of Electrical Power & Energy Systems*, 129, 106739 (2021)
- Faia, R., Soares, J., Vale, Z., & Corchado, J. M. (2021) An Optimization Model for Energy Community Costs Minimization Considering a Local Electricity Market between Prosumers and Electric Vehicles. *Electronics*, 10(2), 129
- Faia, R., Soares, J., Vale, Z., & Corchado, J. M.: An Optimization Model for Energy Community Costs Minimization Considering a Local Electricity Market between Prosumers and Electric Vehicles. *Electronics*, 10(2), 129 (2021)
- Farzaneh Zafary (2019) Ranking Factors Affecting Organizational Readiness to Implement Enterprise Resource Planning Systems Using Fuzzy-Dimensional Network Analysis. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 3, 35-50.
- Fatmah Assiri (2020) Methods for Assessing, Predicting, and Improving Data Veracity: A survey. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 9, n. 4, 5-30.
- Fdez-Riverola, Florentino, and Juan M. Corchado. "CBR based system for forecasting red tides." *Applications and Innovations in Intelligent Systems X*. Springer, London, 2003. 179-192.
- Fdez-Riverola, Florentino, and Juan M. Corchado. "Fsfrt: Forecasting system for red tides." *Applied Intelligence* 21.3 (2004): 251-264.
- Fdez-Riverola, Florentino, and Juan M. Corchado. "Fsfrt: Forecasting system for red tides. a hybrid autonomous ai model." *Applied Artificial Intelligence* 17.10 (2003): 955-982.
- Fdez-Riverola, Florentino, et al. "Applying lazy learning algorithms to tackle concept drift in spam filtering." *Expert Systems with Applications* 33.1 (2007): 36-48.
- Fdez-Riverola, Florentino, et al. "Improving gene selection in microarray data analysis using fuzzy patterns inside a cbr system." *International Conference on Case-Based Reasoning*. Springer, Berlin, Heidelberg, 2005.
- Fdez-Riverola, Florentino, et al. "SpamHunting: An instance-based reasoning system for spam labelling and filtering." *Decision Support Systems* 43.3 (2007): 722-736.
- Fdez-Riverola, Florentino, Fernando Díaz, and Juan M. Corchado. "Applying rough sets reduction techniques to the construction of a fuzzy rule base for case based reasoning." *Ibero-American Conference on Artificial Intelligence*. Springer, Berlin, Heidelberg, 2004.

- Fdez-Riverola, Florentino, Juan M. Corchado, and Jesús M. Torres. "An automated hybrid cbr system for forecasting." *European Conference on Case-Based Reasoning*. Springer, Berlin, Heidelberg, 2002.
- Fdez-Riverola, F., and Juan M. Corchado. "Forecasting red tides using an hybrid neuro-symbolic system." *AI Communications* 16.4 (2003): 221-233.
- Fernández-Riverola, Florentino, and Juan M. Corchado. "Employing tsk fuzzy models to automate the revision stage of a cbr system." *Conference on Technology Transfer*. Springer, Berlin, Heidelberg, 2003.
- Fernandez-Riverola, Florentino, Fernando Díaz, and Juan M. Corchado. "Reducing the memory size of a fuzzy case-based reasoning system applying rough set techniques." *IEEE Transactions on Systems, Man, and Cybernetics, Part C (Applications and Reviews)* 37.1 (2006): 138-146.
- Fernando de la Prieta, Juan M. Corchado Rodríguez (2021) Neural networks and learning systems in distributed computing and artificial intelligence. *Neurocomputing* 423: 668-669
- Fernando de la Prieta, Juan M. Corchado Rodríguez: Neural networks and learning systems in distributed computing and artificial intelligence. *Neurocomputing* 423: 668-669 (2021)
- Francisco Lecumberri de Alba, Alfonso González-Briones, Pablo Chamoso, Tiago Pinto, Zita A. Vale, Juan M. Corchado (2020) A P2P Electricity Negotiation Agent Systems in Urban Smart Grids. *DCAI (Special Sessions) 2020*: 97-106
- Francisco Pinto-Santos, Zakieh Alizadeh-Sani, David Alonso-Moro, Alfonso González-Briones, Pablo Chamoso, Juan M. Corchado: A Template-Based Approach to Code Generation Within an Agent Paradigm. *PAAMS (Workshops) 2021*: 296-307
- Francisco Pinto-Santos, Zakieh Alizadeh-Sani, David Alonso-Moro, Alfonso González-Briones, Pablo Chamoso, Juan M. Corchado (2021) A Template-Based Approach to Code Generation Within an Agent Paradigm. *PAAMS (Workshops) 2021*: 296-307
- Frank Dignum, Juan Manuel Corchado, Fernando de la Prieta (2021) Advances in Practical Applications of Agents, Multi-Agent Systems, and Social Good. The PAAMS Collection - 19th International Conference, PAAMS 2021, Salamanca, Spain, October 6-8, 2021, Proceedings. *Lecture Notes in Computer Science 12946*, Springer 2021, ISBN 978-3-030-85738-7
- Frank Dignum, Juan Manuel Corchado, Fernando de la Prieta: Advances in Practical Applications of Agents, Multi-Agent Systems, and Social Good. The PAAMS Collection - 19th International Conference, PAAMS 2021, Salamanca, Spain, October 6-8, 2021, Proceedings. *Lecture Notes in Computer Science 12946*, Springer 2021, ISBN 978-3-030-85738-7
- Fumiaki Eguchi, Kenji Matsui, Yoshihisa Nakatoh, Yumiko O. Kato, Alberto Rivas, Juan Manuel Corchado: Development of Mobile Device-Based Speech Enhancement System Using Lip-Reading. *DCAI (1) 2021*: 210-220
- Fumiaki Eguchi, Kenji Matsui, Yoshihisa Nakatoh, Yumiko O. Kato, Alberto Rivas, Juan Manuel Corchado (2021) Development of Mobile Device-Based Speech Enhancement System Using Lip-Reading. *DCAI (1) 2021*: 210-220
- Fyfe, Colin, and Juan Corchado. "A comparison of kernel methods for instantiating case based reasoning systems." *Advanced Engineering Informatics* 16.3 (2002): 165-178.
- Fyfe, Colin, and Juan Corchado. "A comparison of kernel methods for instantiating case based reasoning systems." *Advanced Engineering Informatics* 16.3 (2002): 165-178.
- Fyfe, Colin, and Juan M. Corchado. "Automating the construction of CBR Systems using Kernel Methods." *International Journal of Intelligent Systems* 16.4 (2001): 571-586.
- Gabriel Santos, Alda Canito, Rui Carvalho, Tiago Pinto, Zita A. Vale, Goreti Marreiros, Juan M. Corchado: Semantic Services Catalog for Multiagent Systems Society. *PAAMS 2021*: 229-240

- Gabriel Santos, Alda Canito, Rui Carvalho, Tiago Pinto, Zita A. Vale, Goreti Marreiros, Juan M. Corchado (2021) Semantic Services Catalog for Multiagent Systems Society. PAAMS 2021: 229-240
- Gabriel Santos, Tiago Pinto, Zita A. Vale, Juan M. Corchado (2021) Semantic Interoperability for Multiagent Simulation and Decision Support in Power Systems. PAAMS (Workshops) 2021: 215-226
- Gabriel Santos, Tiago Pinto, Zita A. Vale, Juan M. Corchado: Semantic Interoperability for Multiagent Simulation and Decision Support in Power Systems. PAAMS (Workshops) 2021: 215-226
- Garcia-Retuerta, D., Chamoso, P., Hernández, G., Guzmán, A. S. R., Yigitcanlar, T., & Corchado, J. M.: An Efficient Management Platform for Developing Smart Cities: Solution for Real-Time and Future Crowd Detection. *Electronics*, 10(7), 765 (2021)
- Garcia-Retuerta, D., Chamoso, P., Hernández, G., Guzmán, A. S. R., Yigitcanlar, T., & Corchado, J. M. (2021) An Efficient Management Platform for Developing Smart Cities: Solution for Real-Time and Future Crowd Detection. *Electronics*, 10(7), 765
- George Katranas, Andreas Riel , Juan Manuel Corchado Rodríguez, Marta Plaza-Hernández (2020) The SMARTSEA Education Approach to Leveraging the Internet of Things in the Maritime Industry. *EuroSPI 2020*: 247-258
- Giancarlo Souza De Freitas, Thiago Ângelo Gelaim, Rodrigo Rodrigues Pires De Mello, Ricardo Az (2019) Perception Policies for Intelligent Virtual Agents. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 2, 87-95.
- Girish Talmale, Urmila Shrawankar (2021) Cluster Based Real Time Scheduling for Distributed System. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 10, n. 2.
- Glez-Bedia, M., et al. "Analytical model for constructing deliberative agents." *Engineering Intelligent Systems for Electrical Engineering and Communications* 10.3 (2002): 173-185.
- Glez-Peña, Daniel, et al. "geneCBR: a translational tool for multiple-microarray analysis and integrative information retrieval for aiding diagnosis in cancer research." *BMC bioinformatics* 10.1 (2009): 1-8.
- González Bedia, Manuel, and Juan Manuel Corchado Rodríguez. "A planning strategy based on variational calculus for deliberative agents." (2002).
- González-Briones, Alfonso, et al. "Agreement technologies for energy optimization at home." *Sensors* 18.5 (2018): 1633.
- González-Briones, Alfonso, et al. "Energy optimization using a case-based reasoning strategy." *Sensors* 18.3 (2018): 865.
- González-Briones, Alfonso, et al. "GreenVMAS: virtual organization based platform for heating greenhouses using waste energy from power plants." *Sensors* 18.3 (2018): 861.
- González-Briones, Alfonso, et al. "Multi-agent systems applications in energy optimization problems: A state-of-the-art review." *Energies* 11.8 (2018): 1928.
- Gopal Sakarkar, Mahesh Kumar H Kolekar, Ketan Paithankar, Gaurav Patil, Prateek Dutta Ruchi Chaturvedi, Shivam Kumar (2021) Advance Approach for Detection of DNS Tunneling Attack from Network Packets Using Deep Learning Algorithms. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 10, n. 3, 241-266.
- Guillermo Hernández, Sara Rodríguez, Angélica González, Juan Manuel Corchado Rodríguez, Javier Prieto (2020) Video Analysis System Using Deep Learning Algorithms. *ISAmI 2020*: 186-199
- Gulchin Abdullayeva, Ulker Alizade (2019) An Information Recognition System for Complex Images. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 3, 79-93.

- Hanaa Al-Lohibi, Tahani Alkhamisi, Maha Assagran, Amal Aljohani, Asia Othaman Aljahdali (2020) Awjedni: A Reverse-Image-Search Application. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 3, 49-68.
- Hernández-Nieves, E., Parra-Domínguez, J., Chamoso, P., Rodríguez-González, S., & Corchado, J. M.: A Data Mining and Analysis Platform for Investment Recommendations. Electronics, 10(7), 859 (2021).
- Hernández-Nieves, E., Parra-Domínguez, J., Chamoso, P., Rodríguez-González, S., & Corchado, J. M. (2021) A Data Mining and Analysis Platform for Investment Recommendations. Electronics, 10(7), 859 .
- Iqtidar Ali, Tariq Hussain, Kamran Khan, Arshad Iqbal, Fatima Perviz (2020) The Impact of IEEE 802.11 Contention Window on The Performance of Transmission Control Protocol in Mobile Ad-Hoc Network. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 3, 29-48.
- Israel Campero-Jurado, Sergio Márquez Sánchez, Juan Quintanar Gomez, Sara Rodríguez, Juan M. Corchado (2020) Smart Helmet 5.0 for Industrial Internet of Things Using Artificial Intelligence. Sensors 20(21): 6241
- Javier Parra Domínguez, Pedro Roseiro (2020) Blockchain: a brief review of Agri-Food Supply Chain Solutions and Opportunities. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 4, 95-106.
- Javier Prieto, Ashok Kumar Das, Stefano Ferretti, António Pinto, Juan Manuel Corchado (2020) Blockchain and Applications - International Congress, BLOCKCHAIN 2019, Avila, Spain, 26-28 June, 2019. Advances in Intelligent Systems and Computing 1010, Springer 2020, ISBN 978-3-030-23812-4
- Jonas Queiroz, Paulo Leitão, Joseane Pontes, André Chaves, Javier Parra, María Eugenia Perez-Pons (2020) A Quality Innovation Strategy for an Inter-regional Digital Innovation Hub. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 4, 31-45.
- Jose A. Maderuelo-Fernandez, Angel Garcia-Garcia, Pablo Chamoso, José I. Recio-Rodríguez, Sara Rodríguez-González, Maria C. Patino-Alonso, Emiliano Rodriguez-Sanchez, Juan M. Corchado Rodríguez, Manuel A. Gómez-Marcos, Luis García-Ortiz (2020) Automatic image analyser to assess retinal vessel calibre (ALTAIR). A new tool to evaluate the thickness, area and length of the vessels of the retina. Int. J. Medical Informatics 136: 104090
- José A. Maestro, Sara Rodríguez, R. Casado, Javier Prieto, Juan M. Corchado (2020) Comparison of Efficient Planning and Optimization Methods of Last Mile Delivery Resources. BROADNETS 2020: 163-173
- Jose Alberto Maestro-Prieto, Sara Rodríguez, Roberto Casado, Juan Manuel Corchado (2020) Agent organisations: from independent agents to virtual organisations and societies of agents. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 4, 55-70.
- Juan M. Corchado, Francisco Pinto-Santos, Otman Aghmou, Saber Trabelsi: Intelligent Development of Smart Cities: Deepint.net Case Studies. SSCT 2021: 211-225
- Juan M. Corchado, Francisco Pinto-Santos, Otman Aghmou, Saber Trabelsi (2021) Intelligent Development of Smart Cities: Deepint.net Case Studies. SSCT 2021: 211-225
- Juan M. Corchado, Pablo Chamoso, Guillermo Hernández, Agustín San Roman Gutierrez, Alberto Rivas Camacho, Alfonso González-Briones, Francisco Pinto-Santos, Enrique Goyenechea, David García-Retuerta, María Alonso-Miguel, Beatriz Bellido Hernandez, Diego Valdeolmillos Villaverde, Manuel Sanchez-Verdejo, Pablo Plaza-Martínez, Manuel López-Pérez, Sergio Manzano-García, Ricardo S. Alonso, Roberto Casado-Vara, Javier

- Prieto Tejedor, Fernando de la Prieta, Sara Rodríguez-González, Javier Parra-Domínguez, Mohd Saberi Mohamad, Saber Trabelsi, Enrique Díaz-Plaza Sanz, José Alberto García Coria, Tan Yigitcanlar, Paulo Novais, Sigeru Omatu: Deepint.net: A Rapid Deployment Platform for Smart Territories. *Sensors* 21(1): 236 (2021)
- Juan M. Corchado, Pablo Chamoso, Guillermo Hernández, Agustín San Roman Gutierrez, Alberto Rivas Camacho, Alfonso González-Briones, Francisco Pinto-Santos, Enrique Goyenechea, David García-Retuerta, María Alonso-Miguel, Beatriz Bellido Hernandez, Diego Valdeolmillos Villaverde, Manuel Sanchez-Verdejo, Pablo Plaza-Martínez, Manuel López-Pérez, Sergio Manzano-García, Ricardo S. Alonso, Roberto Casado-Vara, Javier Prieto Tejedor, Fernando de la Prieta, Sara Rodríguez-González, Javier Parra-Domínguez, Mohd Saberi Mohamad, Saber Trabelsi, Enrique Díaz-Plaza Sanz, José Alberto García Coria, Tan Yigitcanlar, Paulo Novais, Sigeru Omatu: Deepint.net: A Rapid Deployment Platform for Smart Territories. *Sensors* 21(1): 236
  - Juan Manuel Corchado (2020) AIoT for Smart territories. *IoTSMMS* 2020: 1
  - Koetsier, Jos, et al. "Kernel maximum likelihood hebbian learning." *International Conference on Computational Science*. Springer, Berlin, Heidelberg, 2004.
  - Kohei Fukuyama, Kenji Matsui, Sigeru Omatsu, Alberto Rivas, Juan Manuel Corchado (2019) Feature Extraction and Classification of Odor Using Attention Based Neural Network. *DCAI* 2019: 142-149
  - Koji Hitomi, Kenji Matsui, Alberto Rivas, Juan Manuel Corchado (2019) Development of a Dangerous Driving Suppression System Using Inverse Reinforcement Learning and Blockchain. *DCAI* 2019: 3-9
  - Lanzarini, Laura. "Redes neuronales artificiales. Un enfoque práctico." *Journal of Computer Science & Technology* 4.2 (2004): 122-124.
  - Laura Pacheco, Naiara Sánchez, Antoni Tur, David Tellez De Meneses (2019) Algorithm Analysis in Multi-agent Systems. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 1, 13-18.
  - Laza, Rosalía, Reyes Pavón, and Juan M. Corchado. "A reasoning model for CBR\_BDI agents using an adaptable fuzzy inference system." *Conference on Technology Transfer*. Springer, Berlin, Heidelberg, 2003.
  - Lees, Brian, and Juan Corchado. "Integrated case-based neural network approach to problem solving." *German Conference on Knowledge-Based Systems*. Springer, Berlin, Heidelberg, 1999.
  - Li, Tiancheng, et al. "A particle dyeing approach for track continuity for the SMC-PHD filter." *17th International Conference on Information Fusion (FUSION)*. IEEE, 2014.
  - Li, Tiancheng, et al. "Algorithm design for parallel implementation of the SMC-PHD filter." *Signal Processing* 119 (2016): 115-127.
  - Li, Tiancheng, et al. "Fight sample degeneracy and impoverishment in particle filters: A review of intelligent approaches." *Expert Systems with applications* 41.8 (2014): 3944-3954.
  - Li, Tiancheng, et al. "Random finite set-based Bayesian filters using magnitude-adaptive target birth intensity." *17th International Conference on Information Fusion (FUSION)*. IEEE, 2014.
  - Li, Tiancheng, Juan M. Corchado, and Shudong Sun. "Partial consensus and conservative fusion of Gaussian mixtures for distributed PHD fusion." *IEEE Transactions on Aerospace and Electronic Systems* 55.5 (2018): 2150-2163.
  - Lima, Ana Carolina ES, Leandro Nunes de Castro, and Juan M. Corchado. "A polarity analysis framework for Twitter messages." *Applied Mathematics and Computation* 270 (2015): 756-767.
  - López-Sánchez, D., de Bodt, C., Lee, J. A., Arrieta, A. G., & Corchado, J. M. (2021). Tuning Database-Friendly Random Projection Matrices for Improved Distance Preservation on Specific Data. *Applied Intelligence*, 1-13.

- López-Sánchez, D., de Bodt, C., Lee, J. A., Arrieta, A. G., & Corchado, J. M. (2021) Tuning Database-Friendly Random Projection Matrices for Improved Distance Preservation on Specific Data. *Applied Intelligence*, 1-13.
- Lorna Uden, I-Hsien Ting, Juan Manuel Corchado (2019) Knowledge Management in Organizations - 14th International Conference, KMO 2019, Zamora, Spain, July 15-18, 2019, Proceedings. *Communications in Computer and Information Science* 1027, Springer 2019, ISBN 978-3-030-21450-0
- Louaked, M., Seloula, N., & Trabelsi, S. (2017). Approximation of the unsteady Brinkman-Forchheimer equations by the pressure stabilization method. *Numerical Methods for Partial Differential Equations*, 33(6), 1949-1965.
- Louaked, M., Seloula, N., Sun, S., & Trabelsi, S. (2015). A pseudocompressibility method for the incompressible Brinkman-Forchheimer equations. *Differential and Integral Equations*, 28(3/4), 361-382.
- Luis Gomes, Zita A. Vale, Juan Manuel Corchado Rodríguez (2020) Multi-Agent Microgrid Management System for Single-Board Computers: A Case Study on Peer-to-Peer Energy Trading. *IEEE Access* 8: 64169-64183
- M. Naveenkumar, S. Domnic (2019) Learning Representations from Spatio-Temporal Distance Maps for 3D Action Recognition with Convolutional Neural Networks. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 2, 5-18.
- Maestro-Prieto, J. A., Rodríguez, S., Casado, R., & Corchado, J. M. (2020) Agent organisations: from independent agents to virtual organisations and societies of agents. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal*, 9(4), 55-70
- Mahdi Jemmali (2021) Projects Distribution Algorithms for Regional Development. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 10, n. 3, 293-305.
- Mahesh S Patil, Satyadhyam Chickerur, Anand Meti, Priyanka M Nabapure, Sunaina Mahindrakar, Sonali Na (2019) LSTM Based Lip Reading Approach for Devanagiri Script. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 3, 13-26.
- Malika Amari, Faouzi Didi, Benyoucef Khalili, Foudil Benzerfa, Mohammed Salim Hadjidj (2021) Comparative analysis of the management of the results of the modeling and the simulation of the evaluation of the thermal energy of the greenhouse by a fuzzy logic controller between a wet region and an arid region. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 10, n. 1, 77-97.
- Manuel Pérez-Moríñigo, Víctor Merchán-Montero, José Luis Martín-Pérez (2019) Learning process: Multi-Agent Tutoring System. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 1, 5-12.
- Marcos de Oliveira, Robson Teixeira, Roberta Sousa, Enyo Gonçalves (2021) An Agent-Based Simulation to Explore Communication in a System to Control Urban Traffic with Smart Traffic Lights. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 10, n. 3, 209-225.
- María E. Pérez-Pons, Ricardo S. Alonso, Óscar García, Goreti Marreiros, Juan Manuel Corchado: Deep Q-Learning and Preference Based Multi-Agent System for Sustainable Agricultural Market. *Sensors* 21(16): 5276 (2021)

- María E. Pérez-Pons, Ricardo S. Alonso, Óscar García, Goreti Marreiros, Juan Manuel Corchado (2021) Deep Q-Learning and Preference Based Multi-Agent System for Sustainable Agricultural Market. *Sensors* 21(16): 5276
- Marta Fernandes, Alda Canito, Daniel Mota, Juan M. Corchado, Goreti Marreiros: Service-Oriented Architecture for Data-Driven Fault Detection. *DCAI* (1) 2021: 179-189
- Marta Fernandes, Alda Canito, Daniel Mota, Juan M. Corchado, Goreti Marreiros (2021) Service-Oriented Architecture for Data-Driven Fault Detection. *DCAI* (1) 2021: 179-189
- Marta Fernandes, Alda Canito, Juan Manuel Corchado, Goreti Marreiros (2019) Fault Detection Mechanism of a Predictive Maintenance System Based on Autoregressive Integrated Moving Average Models. *DCAI* 2019: 171-180
- Marta Plaza-Hernández, Ana Belén Gil González, Sara Rodríguez-González, Javier Prieto Tejedor, Juan Manuel Corchado Rodríguez (2020) Integration of IoT Technologies in the Maritime Industry. *DCAI (Special Sessions)* 2020: 107-115
- Marta Plaza-Hernández, Juan Manuel Corchado Rodríguez (2021) Smart-Heritage: An Intelligent Platform for the Monitoring of Cultural Heritage in Smart Cities. *SSCT* 2021: 324-327
- Marta Plaza-Hernández, Juan Manuel Corchado Rodríguez: Smart-Heritage: An Intelligent Platform for the Monitoring of Cultural Heritage in Smart Cities. *SSCT* 2021: 324-327
- Mata, Aitor, and Juan Manuel Corchado. "Forecasting the probability of finding oil slicks using a CBR system." *Expert Systems with Applications* 36.4 (2009): 8239-8246.
- Mauser, N. J., & Trabelsi, S. (2010). L2 analysis of the multi-configuration time-dependent hartree–fock equations. *Mathematical Models and Methods in Applied Sciences*, 20(11), 2053-2073.
- Méndez, José Ramon, et al. "A comparative performance study of feature selection methods for the anti-spam filtering domain." *Industrial Conference on Data Mining*. Springer, Berlin, Heidelberg, 2006.
- Méndez, José Ramon, et al. "Tokenising, stemming and stopword removal on anti-spam filtering domain." *Conference of the Spanish Association for Artificial Intelligence*. Springer, Berlin, Heidelberg, 2005.
- Méndez, José Ramon, et al. "Tracking concept drift at feature selection stage in spamhunting: An anti-spam instance-based reasoning system." *European conference on case-based reasoning*. Springer, Berlin, Heidelberg, 2006.
- Morente-Molinera, Juan Antonio, et al. "Solving multi-criteria group decision making problems under environments with a high number of alternatives using fuzzy ontologies and multi-granular linguistic modelling methods." *Knowledge-Based Systems* 137 (2017): 54-64.
- Muaadh Abdo Mohammed Ahmed AL sabri (2021) Hybrid Measuring the Similarity Value Based on Genetic Algorithm for Improving Prediction in A Collaborative Filtering Recommendation System. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 10, n. 2.
- Muhammad Muzammul (2019) Education System re-engineering with AI (artificial intelligence) for Quality Im-provements with proposed model. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 2, 51-60.
- Muhammad Umer, Muhammad Awais, Muhammad Muzammul (2019) Stock Market Prediction Using Machine Learning (ML) Algorithms. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 4, 97-116.
- Muhammet Sinan Basarslan, Fatih Kayaalp (2020) Sentiment Analysis with Machine Learning Methods on Social Media. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 9, n. 3, 5-15.



- Nahla Aljojo (2020) Digital Information Needs for Understanding Cell Divisions in the Human Body. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 2, 5-22.
- Nahla Aljojo (2020) Kids' Atlas application to Learn about Geography and Maps. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 2, 33-48.
- Naveed Hussain, Hamid Turab Mirza, Ibrar Hussain (2019) Detecting Spam Review through Spammer's Behavior Analysis. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 8, n. 2, 61-71.
- Neha Kailash Nawandar, Vishal Satpute (2019) IoT based intelligent irrigation support system for smart farming applications. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 8, n. 2, 75-85.
- Nibeth Mena Mamani (2020) Machine Learning techniques and Polygenic Risk Score application to prediction genetic diseases. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 1, 5-14.
- Niloufar Shoeibi, Alberto Martín Mateos, Alberto Rivas Camacho, Juan M. Corchado (2020) A Feature Based Approach on Behavior Analysis of the Users on Twitter: A Case Study of AusOpen Tennis Championship. DCAI 2020: 284-294
- Niloufar Shoeibi, Farrokh Karimi, Juan Manuel Corchado (2019) Artificial Intelligence as a Way of Overcoming Visual Disorders: Damages Related to Visual Cortex, Optic Nerves and Eyes. DCAI (Special Sessions) 2019: 183-187
- Noor Fatima (2020) Enhancing Performance of a Deep Neural Network by Comparing Optimizers Experimentally. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 2, 79-90.
- Nuria Mateos García (2019) Multi-agent system for anomaly detection in Industry 4.0 using Machine Learning techniques. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 8, n. 4, 33-40.
- Oelz, D., & Trabelsi, S. (2014). Analysis of a relaxation scheme for a nonlinear Schrödinger equation occurring in plasma physics. *Mathematical Modelling and Analysis*, 19(2), 257-274.
- Pablo Chamoso, Alfonso González-Briones, Fernando de la Prieta, Kumar G. Venyagamoorthy, Juan M. Corchado: Smart city as a distributed platform: Toward a system for citizen-oriented management. *Comput. Commun.* 152: 323-332
- Pavón, Juan, and J. Corchado. "Agents for the web." *International journal of Web engineering and technology* 1.4 (2004): 393-396.
- Pavón, Juan, et al. "Mobile tourist guide services with software agents." *International Workshop on Mobile Agents for Telecommunication Applications*. Springer, Berlin, Heidelberg, 2004.
- Pedro Sánchez, Denis Pato, Gabriel Martín (2019) CTRANSPORT: Multi-agent-based simulation. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 8, n. 1, 19-26.
- Pervez Ahmad (2021) A Review on Blockchain's Applications and Implementations. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 10, n. 2.
- Rafi Ullah, Ayaz H. Khan, S.M. Emaduddin (2019) ck-NN: A Clustered k-Nearest Neighbours Approach for Large-Scale Classification. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 8, n. 3, 67-77.
- Raneem Nono, Rawan Alsudais, Raghad Alshmrani, Sumayyah Alamoudi, Asia Othaman Aljahdali (2020) Intelligent Traffic Light for Ambulance Clearance. ADCAIJ: Advances in

Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 9, n. 3, 89-104.

- Ricardo Faia, João P. Soares, Tiago Pinto, Fernando Lezama, Zita A. Vale, Juan M. Corchado: Optimal Model for Local Energy Community Scheduling Considering Peer to Peer Electricity Transactions. *IEEE Access* 9: 12420-12430 (2021)
- Ricardo Faia, João P. Soares, Tiago Pinto, Fernando Lezama, Zita A. Vale, Juan M. Corchado (2021) Optimal Model for Local Energy Community Scheduling Considering Peer to Peer Electricity Transactions. *IEEE Access* 9: 12420-12430
- Ricardo S. Alonso, Inés Sittón-Candanedo, Roberto Casado-Vara , Javier Prieto , Juan M. Corchado (2020) Deep Reinforcement Learning for the management of Software-Defined Networks in Smart Farming. *COINS 2020*: 1-6
- Rishi Kumar Srivastav, Devendra Agrawal, Anurag Shrivastava (2020) A Survey on Vulnerabilities and Performance Evaluation Criteria in Blockchain Technology. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 9, n. 2, 91-105.
- Rivas, A., González-Briones, A., Cea-Morán, J. J., Prat-Pérez, A., & Corchado, J. M. (2021). My-Trac: System for Recommendation of Points of Interest on the Basis of Twitter Profiles. *Electronics*, 10(11), 1263.
- Rivas, A., González-Briones, A., Cea-Morán, J. J., Prat-Pérez, A., & Corchado, J. M. . My-Trac: System for Recommendation of Points of Interest on the Basis of Twitter Profiles. *Electronics*, 10(11), 1263.
- Rivas, Alberto, et al. "Detection of cattle using drones and convolutional neural networks." *Sensors* 18.7 (2018): 2048.
- Roberto Casado-Vara, Ángel Martín del Rey, Soffiene Affes, Javier Prieto, Juan M. Corchado (2020) IoT network slicing on virtual layers of homogeneous data for improved algorithm operation in smart buildings. *Future Gener. Comput. Syst.* 102: 965-977
- Roberto Casado-Vara, David García-Retuerta, Álvaro Bartolomé, Esteban Jove, José Luís Calvo-Rolle, Ángel Martín del Rey, Juan M. Corchado (2020) Demand Control Ventilation Strategy by Tracing the Radon Concentration in Smart Buildings. *SOCO 2020*: 374-382
- Roberto Casado-Vara, Fernando de la Prieta, Javier Prieto, Juan M. Corchado (2019) Improving Temperature Control in Smart Buildings Based in IoT Network Slicing Technique. *GLOBECOM 2019*: 1-6
- Rodríguez Oconitrillo, L. R., Vargas, J. J., Camacho, A., Burgos, Á., & Corchado, J. M. (2021). RYEL: An Experimental Study in the Behavioral Response of Judges Using a Novel Technique for Acquiring Higher-Order Thinking Based on Explainable Artificial Intelligence and Case-Based Reasoning. *Electronics*, 10(12), 1500.
- Rodríguez, Juan Manuel Corchado, Jim Aiken, and Nigel Rees. *Artificial Intelligence Models for Oceanographic Forecasting*. Plymouth Marine Laboratory.
- Rodríguez, S., et al. "People detection and stereoscopic analysis using MAS." *2010 IEEE 14th International Conference on Intelligent Engineering Systems*. IEEE, 2010.
- Rodríguez, Sara, et al. "Agents and computer vision for processing stereoscopic images." *International Conference on Hybrid Artificial Intelligence Systems*. Springer, Berlin, Heidelberg, 2010.
- Ruba Khan, Shadab Siddiqui, Abhishek Rastogi (2021) Crime Detection Using Sentiment Analysis. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 10, n. 3, 281-291.
- Satya Bhushan Verma, Abhay Kumar Yadav (2019) Detection of Hard Exudates in Retinopathy Images. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 4, 41-48.

- Satya Bhushan Verma, Shashi Bhushan Verma (2020) Secure Data Transmission in BPEL (Business Process Execution Language). *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 9, n. 3, 105-117.
- Sergio Márquez Sánchez (2020) Doll and robot use as innovative components in therapy. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 9, n. 1, 99-112.
- Sergio Márquez Sánchez (2020) Integral Support Predictive Platform for Industry 4.0. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 9, n. 4, 71-82.
- Sergio Márquez Sánchez, Francisco Lecumberri, Vishwani Sati, Ashish Arora, Niloufar Shoeibi, Sara Rodríguez, Juan M. Corchado Rodríguez (2020) Edge Computing Driven Smart Personal Protective System Deployed on NVIDIA Jetson and Integrated with ROS. *PAAMS (Workshops) 2020: 385-393*
- Sergio Márquez Sánchez, Israel Campero-Jurado, Daniel Robles-Camarillo, Sara Rodríguez, Juan M. Corchado Rodríguez: BeSafe B2.0 Smart Multisensory Platform for Safety in Workplaces. *Sensors 21(10): 3372 (2021)*
- Sergio Márquez Sánchez, Israel Campero-Jurado, Daniel Robles-Camarillo, Sara Rodríguez, Juan M. Corchado Rodríguez (2021) BeSafe B2.0 Smart Multisensory Platform for Safety in Workplaces. *Sensors 21(10): 3372*
- Sergio Márquez Sánchez, Israel Campero-Jurado, Jorge Herrera-Santos, Sara Rodríguez, Juan M. Corchado: Intelligent Platform Based on Smart PPE for Safety in Workplaces. *Sensors 21(14): 4652 (2021)*
- Sergio Márquez Sánchez, Israel Campero-Jurado, Jorge Herrera-Santos, Sara Rodríguez, Juan M. Corchado: Intelligent Platform Based on Smart PPE for Safety in Workplaces. *Sensors 21(14): 4652*
- Sergio Márquez Sánchez, Roberto Casado-Vara, Francisco Javier García Criado, Sara Rodríguez-González, Javier Prieto Tejedor, Juan Manuel Corchado (2019) Smart PPE and CPE Platform for Electric Industry Workforce. *SOCO 2019: 422-431*
- Sergio Miguel Tomé (2019) Towards a model-theoretic framework for describing the semantic aspects of cognitive processes. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 4, 83-96.
- SHADAB Siddiqui, MANUJ Darbari, Diwakar Yagyasen (2020) Modelling and Simulation of Queuing Models through the concept of Petri Nets. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 9, n. 3, 17-28.
- Shefali Dhingra, Poonam Bansal (2019) An Intelligent Multi-Resolutional and Rotational Invariant Texture Descriptor for Image Retrieval Systems. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 8, n. 2, 33-49.
- Sittón-Candanedo, Inés, et al. "A review of edge computing reference architectures and a new global edge proposal." *Future Generation Computer Systems* 99 (2019): 278-294.
- Takeda, Fumiaki, and Sigeru Omatu. "High speed paper currency recognition by neural networks." *IEEE Transactions on Neural Networks* 6.1 (1995): 73-77.
- Tan Yigitcanlar, Luke Butler, Emily Windle, Kevin C. Desouza, Rashid Mehmood, Juan M. Corchado (2020) Can Building "Artificially Intelligent Cities" Safeguard Humanity from Natural Disasters, Pandemics, and Other Catastrophes? An Urban Scholar's Perspective. *Sensors 20(10): 2988*
- Tapia, Dante I., and Juan M. Corchado. "An ambient intelligence based multi-agent system for alzheimer health care." *International Journal of Ambient Computing and Intelligence (IJACI)* 1.1 (2009): 15-26.

- Tapia, Dante I., et al. "Agents and ambient intelligence: case studies." *Journal of Ambient Intelligence and Humanized Computing* 1.2 (2010): 85-93.
- Tapia, Dante I., et al. "Integrating hardware agents into an enhanced multi-agent architecture for Ambient Intelligence systems." *Information Sciences* 222 (2013): 47-65.
- Tiago Pinto, Ricardo Faia , María Navarro-Cáceres, Gabriel Santos , Juan Manuel Corchado , Zita A. Vale (2019) Multi-Agent-Based CBR Recommender System for Intelligent Energy Management in Buildings. *IEEE Syst. J.* 13(1): 1084-1095
- Tiancheng Li, Hongqi Fan, Jesús García Herrero, Juan M. Corchado (2019) Second Order Statistics Analysis and Comparison between Arithmetic and Geometric Average Fusion. *CoRR abs/1901.08015*
- Titi, E. S., & Trabelsi, S. (2018). Global well-posedness of a 3D MHD model in porous media. *arXiv preprint arXiv:1805.10661*.
- Tomonori Nakahara, Kohei Fukuyama, Mitsuru Hamada, Kenji Matsui, Yoshihisa Nakatoh, Yumiko O. Kato, Alberto Rivas, Juan Manuel Corchado: Mobile Device-Based Speech Enhancement System Using Lip-Reading. *DCAI 2020*: 159-167
- Trabelsi, S. (2007). Solutions of the multi-configuration time-dependent equations in quantum chemistry. *CR Math. Acad. Sci. Paris*, 345(3), 145-150.
- Vicente-Gabriel, J., Gil-González, A. B., Luis-Reboredo, A., Chamoso, P., & Corchado, J. M.: LSTM Networks for Overcoming the Challenges Associated with Photovoltaic Module Maintenance in Smart Cities. *Electronics*, 10(1), 78 (2021)
- Vicente-Gabriel, J., Gil-González, A. B., Luis-Reboredo, A., Chamoso, P., & Corchado, J. M. (2021) LSTM Networks for Overcoming the Challenges Associated with Photovoltaic Module Maintenance in Smart Cities. *Electronics*, 10(1), 78
- Vinay priy Mishra (2021) Texture Analysis using wavelet Transform. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 10, n. 1, 5-13.
- Vishwani Sati, Sergio Márquez Sánchez, Niloufar Shoeibi, Ashish Arora, Juan M. Corchado (2020) Face Detection and Recognition, Face Emotion Recognition Through NVIDIA Jetson Nano. *ISAmI 2020*: 177-185
- Wang, Xuedong, et al. "A survey of recent advances in particle filters and remaining challenges for multitarget tracking." *Sensors* 17.12 (2017): 2707.
- Wirawan Istiono (2021) Analysis Performance Of Conventional Algorithm And HMS Algorithm For Four-Way Intersection With Modified Round Robin. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 10, n. 2.
- Yagnik A Rathod (2020) An access control and authorization model with Open stack cloud for Smart Grid. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 9, n. 3, 69-87.
- Yaser AbdulAali Jasim (2021) High-Performance Deep learning to Detection and Tracking Tomato Plant Leaf Predict Disease and Expert Systems. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* (ISSN: 2255-2863), Salamanca, v. 10, n. 2.
- Yeray Mezquita Martín , Javier Parra , Eugenia Pérez , Javier Prieto , Juan Manuel Corchado (2020) Blockchain-Based Systems in Land Registry, A Survey of Their Use and Economic Implications. *CISIS 2020*: 13-22
- Yeray Mezquita Martín, Alfonso González-Briones, Roberto Casado-Vara, Pablo Chamoso, Javier Prieto, Juan Manuel Corchado (2019) Blockchain-Based Architecture: A MAS Proposal for Efficient Agri-Food Supply Chains. *ISAmI 2019*: 89-96
- Yeray Mezquita Martín, Amin Shokri Gazafroudi, Juan M. Corchado, Miadreza Shafie-Khah, Hannu Laaksonen, Aida Kamisalic (2019) Multi-Agent Architecture for Peer-to-Peer Electricity Trading based on Blockchain Technology. *ICAT 2019* (2019) 1-6

- Yeray Mezquita Martín, Diego Valdeolmillos, Alfonso González-Briones, Javier Prieto, Juan Manuel Corchado (2019) Legal Aspects and Emerging Risks in the Use of Smart Contracts Based on Blockchain. KMO 2019: 525-535
- Yeray Mezquita Martín, Ricardo S. Alonso, Roberto Casado-Vara , Javier Prieto , Juan Manuel Corchado (2020) A Review of k-NN Algorithm Based on Classical and Quantum Machine Learning. DCAI (Special Sessions) 2020: 189-198
- Yeray Mezquita, Ana Belén Gil González, Javier Prieto, Juan Manuel Corchado: Cryptocurrencies and Price Prediction: A Survey. BLOCKCHAIN 2021: 339-346
- Yigitcanlar, T., Corchado, J. M., Mehmood, R., Li, R. Y. M., Mossberger, K., & Desouza, K.: Responsible urban innovation with local government artificial intelligence (AI): A conceptual framework and research agenda. Journal of Open Innovation: Technology, Market, and Complexity, 7(1), 71
- Yves Demazeau, Eric Matson, Juan Manuel Corchado, Fernando de la Prieta (2019) Advances in Practical Applications of Survivable Agents and Multi-Agent Systems: The PAAMS Collection - 17th International Conference, PAAMS 2019, Ávila, Spain, June 26-28, 2019, Proceedings. Lecture Notes in Computer Science 11523, Springer 2019, ISBN 978-3-030-24208-4
- Yves Demazeau, Tom Holvoet, Juan M. Corchado, Stefania Costantini (2020) Advances in Practical Applications of Agents, Multi-Agent Systems, and Trustworthiness. The PAAMS Collection - 18th International Conference, PAAMS 2020, L'Aquila, Italy, October 7-9, 2020, Proceedings. Lecture Notes in Computer Science 12092, Springer 2020, ISBN 978-3-030-49777-4
- Zakieh Alizadeh-Sani, Pablo Plaza-Martínez, Guillermo Hernández González, Alfonso González-Briones, Pablo Chamoso, Juan M. Corchado (2021) A Hybrid Supervised/Unsupervised Machine Learning Approach to Classify Web Services. PAAMS (Workshops) 2021: 93-103
- Zehra Karapinar Senturk, Melahat Sevgul Bakay (2021) Machine Learning Based Hand Gesture Recognition via EMG Data. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 10, n. 2.
- Zulfiqar Ali, Israr ur Rehman, Zahoor Jaan (2021) An Empirical Analysis on Software Development Efforts Estimation in Machine Learning Perspective. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal (ISSN: 2255-2863), Salamanca, v. 10, n. 3, 227-240.

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