Adán José-García

Institute of Data Science and Artificial Intelligence
Department of Computer Science, University of Exeter – Exeter, EX4 4QJ, UK

□ 0 752-387-4801   •   ✉ a.jose-garcia@exeter.ac.uk   •   🌐 adanjoga.github.io

Research Interests

- Data Clustering, Multi-view Clustering, Clustering Validation
- Supervised Machine Learning
- Evolutionary Computation, Nature-Inspired Metaheuristics
- Single- and Multi-objective Optimization

Education

Ph.D. in Computer Science	**2013 – 2017**	
Center for Research and Advanced Studies of the National Polytechnic Institute (Cinvestav)		México
Master in Computer Science	**2010 – 2012**	
Center for Research and Advanced Studies of the National Polytechnic Institute (Cinvestav)		México
Bachelor of Engineering	**2005 – 2010**	
Technological Institute of Culiacan		México

Professional Experience

Postdoctoral Research Fellow	**2019 – now**	
Department of Computer Science, University of Exeter		United Kingdom
Postdoctoral Research Associate	**2018 – 2020**	
Alliance Manchester Business School, University of Manchester		United Kingdom
Technical Team Leader	**2012 – 2013**	
Svam International		México

Publications

* In addition to the listed refereed manuscripts, two journal articles are under review. Please, visit my website to find out more details about my papers under review, in preparation and technical reports.

JCR-indexed Journal Articles

[1]: **A. José-García**, J. Handl, W. Gómez-Flores, M. Garza-Fabre. *An Evolutionary Many-objective Approach to Multiview Data Clustering*. Applied Soft Computing, 2020, *(minor reviews)*.

[2]: A. Ezugwu, A. Shukla, **A. José-García**, et al. *Automatic Clustering Algorithms: A Systematic Review and Bibliometric Analysis of Relevant Literature*. Neural Computing and Applications, 2020. DOI: 10.1007/s00521-020-05395-4

[3]: **A. José-García**, W. Gómez-Flores. *Automatic Clustering Using Nature-Inspired Metaheuristics: A Survey*. Applied Soft Computing, (41): 192–213, 2016. DOI: 10.1016/j.asoc.2015.12.001

[4]: **A. José-García**, I. Lopez-Arevalo, V. J. Sosa-Sosa. *A Rule-based Approach for Topic Maps Learning from Relational Databases*. Expert Systems 32 (5): 609–621, 2015. DOI: 10.1111/exsy.12113

Conference Proceedings

[1]: **A. José-García**, J. Handl. On the interaction between distance functions and clustering criteria in multi-objective clustering. *The 2021 International Conference on Evolutionary Multi-Criterion Optimization (EMO)*. Accepted for publication in EMO 2021 Conference.

[2]: **A. José-García**, J. Handl, W. Gómez-Flores, M. Garza-Fabre. Many-view Clustering: An Illustration Using Multiple Dissimilarity Measures, In *"GECCO'19: Proc. of the International Conference on Genetic and Evolutionary Computation"*, p. 213–214, 2019.

[3]: **A. José-García**, W. Gómez-Flores. Evolutionary Clustering Using Multi-Prototype Representation and Connectivity Criterion. In *"MCPR'17: Proc. of the 9th Mexican Conference on Pattern Recognition"*, p. 63–73, 2017.

[4]: **A. José-García**, I. Lopez-Arevalo, V. J. Sosa-Sosa. Building Topic Maps from Relational Databases. In *"CCE'12: Proc. of the 9th International Conference on Electrical Engineering, Computing Science and Automatic Control"*, p. 294–299, 2012.

[5]: **A. José-García**, H. Romero-Monsivais, C. Hernández, A. Rodríguez-Cristerna, I. Rivera-Islas, J. Torres-Jiménez. A Simulated Annealing Algorithm for the Problem of Minimal Addition Chains. In *"EPIA'11: Proc. of the 15th Portuguese Conference on Artificial Intelligence"*, p. 311–325, 2011.

[6]: A. Rodríguez-Cristerna, J. Torres-Jiménez, H. Romero-Monsivais, C. Hernández, I. Rivera-Islas, **A. José-García**. A Mutation-Selection Algorithm for the Problem of Minimum Brauer Chains. In *"MICAI'11: Proc. of the 10th Mexican International Conference on Artificial Intelligence"*, p. 107–118, 2011.

[7]: R. Zataraín-Cabada, M. L. Barrón-Estrada, V. Ponce Angulo, **A. José-García**. A Framework for Creating, Training, and Testing Self-Organizing Maps for Recognizing Learning Styles. In *"Edutainment'10: Proc. of the 5th International Conference on E-learning and Games"*, p. 53–64, 2010.

[8]: R. Zataraín-Cabada, M. L. Barrón-Estrada, V. Ponce Angulo, **A. José-García**, C. A. Reyes García. Identification of Felder-Silverman Learning Styles with a Supervised Neural Network. In *"ICIC'10: Proc. of the 6th International Conference on Intelligent Computing"*, p. 479–486, 2010.

[9]: R. Zataraín-Cabada, M. L. Barrón-Estrada, V. Ponce Angulo, **A. José-García**, C. A. Reyes García. A Learning Social Network with Recognition of Learning Styles Using Neural Networks. In *"MCPR'10: Proc. of the 2nd Mexican Conference on Pattern Recognition"*, p. 199–209, 2010.

Publications Under Review

A. José-García, W. Gómez-Flores. A comparative study of cluster validity indices for automatic data clustering using differential evolution. *Neurocomputing*.

A. José-García, R. Everson, et al. C3-IoC: A career guidance system for assessing student skills using machine learning and network visualisation. *International Journal of Artificial Intelligence in Education*.

Awards and Achievements

- **2019 – 2022**: Member of the Mexican National System of Researchers: Candidate Level
- **2018 – 2019**: CONACYT Postdoctoral Fellowship
- **2013 – 2017**: CONACYT Postgraduate Fellowship
- **2010**: First Place in the Mexican National Fair of Science and Engineering 2010, with the project: "An adaptive social learning network with recognition of learning styles."
- **2007**: Professional IBM Certification in Object-Oriented Analysis and Designed (ID: P39LAM5071)
- **2007**: Sun Microsystems Certified Programmer for Java 2 Platform 1.4 (ID: P68LAM50A5)

Teaching and Mentoring

Teaching Experiences

- **2020 – now**: Fundamentals of Machine Learning (COM1011)
  Teaching Assistant, Autumn Term, University of Exeter, United Kingdom
- **2017 – 2018**: Educational technologies, and Online productivity tools for education
  Lecturer, Regional Centre for Teacher Training and Educational Research, México

Academic Supervision (Software Engineering Projects)

- **2020 – now**: A Cognitive Behavioural Therapy Mobile Application
  Mentoring and Project Supervisor, IoC Student Enterprise, University of Exeter
- **2020 – now**: A Telematics Driving Behaviour Application
  Mentoring and Project Supervisor, IoC Student Enterprise, University of Exeter

Invited Talks

- **Oct 2019**: An Evolutionary Many-objective Approach to Multiview Data Clustering with Application to Breast Lesions Classification. *60 mins Conference*. Cinvestav-IPN, Tamaulipas, Mexico.
- **March 2019**: Multi-view Data Clustering An Illustration Using Multiple Dissimilarity Measures. *45 mins Conference*. Alliance Manchester Business School. The University of Manchester, UK.
- Regularly speaker in non-scientific talks to undergraduate students in Mexico.

Professional Services

Memberships

2019 – now: ACM professional member

Reviewer of Journals

- IEEE Journals: Transactions on Evolutionary Computation | Transactions on Cybernetics
- Elsevier Journals: Computers & Operations Research | Heliyon
- WILEY Journal: Computational Intelligence

Computer Skills

Programming: MATLAB, C/C++, Python, Java

Typography: LaTeX, Markdown, LibreOffice/OpenOffice, Microsoft Office

Miscellaneous: Git, MPI, CUDA, PThreads, numpy, dlib, R, HTML, CSS, Javascrip

References

- **Julia Handl** | julia.handl@manchester.ac.uk | (+44) 01613-063333 (Ext: 63333)
  Professor in Decision Sciences, *Alan Turing Fellow*
  Alliance Manchester Business School, University of Manchester

- **Richard Everson** | richard.everson@exeter.ac.uk | (+44) 01392-724065 (Ext: 4065)
  Professor of Machine Learning
  Department of Computer Science, University of Exeter

- **Wilfrido Gómez-Flores** | wgomez@cinvestav.mx | (+52) 834-107-0249
  Associate Professor of Machine Learning
  Department of Computer Science, Campus Tamaulipas, Cinvestav-IPN