

Adán José-García

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Research Interests

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

Education

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

Professional Experience

Postdoctoral Research Fellow	2019 – now
<i>Department of Computer Science, University of Exeter</i>	United Kingdom
Postdoctoral Research Associate	2018 – 2020
<i>Alliance Manchester Business School, University of Manchester</i>	United Kingdom
Part-time Lecturer	2017 – 2018
<i>Regional Centre for Teacher Training and Educational Research, CRETAM</i>	México
Software Engineering Team Leader	2012 – 2013
<i>SVAM International</i>	México

Publications

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, 2021, (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. Siegmund, B. Fu, A. José-García, et al. *Study and Research on Detection of Fiber Defects using Keypoints and Deep Learning*. International Journal of Pattern Recognition and Artificial Intelligence, 2020. DOI: 10.1142/S0218001421500166
- [4]: 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
- [5]: 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)*. To appear 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. Zatarain-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. Zatarain-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. Zatarain-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. *ACM Transactions on Knowledge Discovery from Data*.
- 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 Design (ID: P39LAM5071)
- **2007**: Sun Microsystems Certified Programmer for Java 2 Platform (ID: P68LAM50A5)

Teaching and Mentoring

Teaching Experiences.....

- **2020 – now:** Fundamentals of Machine Learning (COM1011), *Teaching Assistant*
Autumn Term, University of Exeter, UK
- **2017 – 2018:** Digital Technologies for Education, *Lecturer*
Regional Centre for Teacher Training and Educational Research (CRETAM), México
- **2017 – 2018:** Online Productivity Tools for Education, *Lecturer*
Regional Centre for Teacher Training and Educational Research (CRETAM), México

Academic Supervision (Software Engineering Projects).....

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

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.

Professional Services

Memberships.....

2019 – now: ACM professional member

Reviewer of Journals and Conferences.....

- IEEE Journals: Transactions on Evolutionary Computation | Transactions on Cybernetics
- Elsevier Journals: Computers & Operations Research | Heliyon
- WILEY Journal: Computational Intelligence
- The Genetic and Evolutionary Computation Conference (GECCO): GECCO 2021

Computer Skills

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

Typography: L^AT_EX, Markdown, LibreOffice/OpenOffice, Microsoft Office

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

References

- **Julia Handl** | julia.handl@manchester.ac.uk | (+44) 01613-063333 (Ext: 63333)
Professor in Decision Sciences, Alan Turing Fellow
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- **Richard Everson** | richard.everson@exeter.ac.uk | (+44) 01392-724065 (Ext: 4065)
Professor of Machine Learning
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- **Wilfrido Gómez-Flores** | wgomez@cinvestav.mx | (+52) 834-107-0249
Associate Professor of Machine Learning
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