CURRICULUM VITAE ABREVIADO (CVA)

Date	15/02/2026

Part A. PERSONAL INFORMATION

First name	SALVADOR		
Family name	AGUILAR RUIZ		
Gender		Birth date	
ID number		Web	
e-mail		https://investiga.upo.es/investigadores/159966/detalle	
Open Researcher ID (ORCID)		0000-0002-2666-293X	

A.1. Current position

Position	FULL PROFESSOR		
Initial date	05/07/2012		
Institution	PABLO DE OLAVIDE UNIVERSITY		
Department/Center		SCHOOL OF ENGINEERING	
Country	SPAIN	Teleph. number	
Key words	Data Analytics, Data Mining, Machine Learning		

A.2. Previous positions

Period	Position/Institution/Country/Interruption cause
2005-2012	ASSOCIATE PROFESSOR, PABLO DE OLAVIDE UNIVERSITY, SPAIN
2003-2005	ASSOCIATE PROFESSOR, UNIVERSITY OF SEVILLE, SPAIN
1998-2003	ASSISTANT PROFESSOR, UNIVERSITY OF SEVILLE, SPAIN

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD in Computer Science	UNIVERSITY OF SEVILLE, SPAIN	2001
BSc Computer Science	UNIVERSITY OF SEVILLE, SPAIN	1997

Part B. CV SUMMARY

Research six-year periods: 4
Transfer six-year periods: 1 (2007-2013)
Publications in journals (JCR): 68 (26: Q1; 6 Q2; 12: Q3; 24: Q4)
Supervised PhD theses: 12
Dean of School of Engineering (Sept. 2005- Dec. 2015)

Part C. RELEVANT MERITS

C.1. Publications

IF 9.283, 2/71 Biochemical Res. Meth. Q1, 5/160 Biotech & Applied Microb. Q1
Gene association analysis: a survey of frequent pattern mining from gene expression data. R. Alves, D. S. Rodríguez-Baena, Jesús S. Aguilar-Ruiz. Briefings in Bioinformatics 11(2): 210-224, 2010.

IF 6.019 1/81 Stat & Probab Q1, 1/76 Math, Interdisc applic Q1, Comp Sci Interdisc app Q1
Shifting and Scaling Patterns from Gene Expression Data. Jesús S. Aguilar-Ruiz. Bioinformatics, 21(10), 3840-3845, 2005.

IF 5.468, 7/72 Biochem Res Meth Q1, 1/47 Math & Comput Biol Q1
A biclustering algorithm for extracting bit-patterns from binary datasets. D. S. Rodríguez-Baena, A. J. Pérez-Pulido, Jesús S. Aguilar-Ruiz. Bioinformatics 27(19): 2738-2745, 2011.

IF 5.468, 7/72 Biochem Res Meth Q1, 1/47 Math & Comput Biol Q1
Prognostic transcriptional association networks: a new supervised approach based on regression trees. I. Nepomuceno-Chamorro, F. Azuaje, Y. Devaux, P. V. Nazarov, A. Muller, Jesús S. Aguilar-Ruiz, D. R Wagner. Bioinformatics. 27(2):252-8, 2011.

IF 5.323, 7/75 Biochem Res Meth Q1, 2/47 Math & Comput Biol Q1
Contact map prediction using a large-scale ensemble of rule sets and the fusion of multiple predicted structural features. J. Bacardit, P. Widera, A. Márquez-Chamorro, F. Divina, Jesús S. Aguilar-Ruiz, N. Krasnogor. Bioinformatics, 28(19): 2441-8, 2012.

IF 3.787, 4/37 Comp Bio Q1
Inferring gene regression networks with model trees. I. Nepomuceno-Chamorro, Jesús S Aguilar-Ruiz, J. C. Riquelme. BMC bioinformatics, 11:517, 2010.

IF 3.643, 6/132 Inf Sys Q1
Searching for rules to detect defective modules: A subgroup discovery approach. D. Rodríguez, R. Ruiz, J. C. Riquelme, Jesús S. Aguilar-Ruiz. Information Sciences. 191: 14-30, 2012.

IF: 3.234, 9/57 Multidisciplinary Science Q1
Quality Measures for Gene Expression Biclusters. Beatriz Pontes, Raúl Giráldez, Jesús S. Aguilar-Ruiz. PLoS One, Vol. 10(3):e0115497, 2015.

IF 2.810, 17/123 Comp Sci, Art Intel Q1
Scatter Search-based identification of local patterns with positive and negative correlations in gene expression data. J. A. Nepomuceno, A. Troncoso, J. Aguilar-Ruiz. Applied Soft Computing, 35: 637-651, 2015.

IF 2.810, 17/123 Comp Sci, Art Intel Q1
Soft Computing Methods for the Prediction of Protein Tertiary Structures: a Survey. Alfonso E. Márquez-Chamorro, G. Asencio-Cortés, Cosme E. Santiesteban-Toca, Jesús S. Aguilar-Ruiz. Applied Soft Computing, 35, pp. 398-410, 2015.

C.2 Ph. D. Supervisions

- Raúl Giráldez. Improvements on Efficiency of Evolutionary Algorithms in Supervised Learning. (co-supervised with J. Riquelme) July 9, 2004 (Cum Laude) - Doctoral Diss. Award, University of Seville.
- Roberto Ruiz. Feature Selection ranking-based heuristics for high-dimensional data. (co-supervised with J. Riquelme) June 30th, 2006 (Cum Laude) - European Doctorate. University of Seville.
- Francisco J. Ferrer Troyano. Decision Rules generation and visualization from data streams. (co-supervised with J. Riquelme) July, 2006 (Cum Laude). University of Seville.
- Isabel Nepomuceno. Inferring gene networks from gene expression data. May 27, 2011 (Cum laude) - European Doctorate - Doctoral Dissertation Award, Pablo de Olavide University.
- Norberto Diaz. Gene Functional Similarity based on Biological Knowledge. March 5, 2012 (Cum laude) Pablo de Olavide University.
- Domingo S. Rodríguez. Bicluster Extraction and Validation from Binary Databases. March 6, 2012 (Cum laude) - Pablo de Olavide University.
- Alfonso Márquez Chamorro. New Evolutionary Approaches to Protein Structure Prediction. March 18, 2013 (Cum Laude) Pablo de Olavide University.
- Beatriz Pontes Balanza. Evolutionary Biclustering of Gene Expression Data: Shifting and Scaling Pattern-based Evaluation. June 3, 2013 (Cum Laude) - University of Seville.
- Gualberto Asencio Cortés. Predicción de estructuras de proteínas basada en vecinos más cercanos. July 11, 2013 (Cum Laude), Pablo de Olavide University.
- Dayrelis Mena Torres. Clasificación de flujos de datos basada en similitud. June 26, 2014 (Cum Laude) University of Granada.
- Juan Antonio Nepomuceno Chamorro. Biclustering sobre datos de expresión génica basado en búsqueda dispersa. July 21, 2015 (Cum laude) University of Sevilla.
- Cosme Ernesto Santiesteban Toca. Predicción de mapas de contactos de proteínas mediante multiclasificadores. Sept 17, 2015 (Cum laude) University of Granada.

C.3. Congress

Since 1998 I have attended a number of conferences, have participated in the Program Committees of the most relevant conferences in the field: KDD, ICML, ECML, PRIB, IEA/AIE, GECCO, EVOBIO, PPSN, SDM, SAC, IBERAMIA, HIS, KES, JISBD, EPIA, MAEB, TAMIDA, among others, and have published over 150 papers.

C.4. Reviewer

I have served as a reviewer for many relevant journals: Nature, Bioinformatics, Pattern Recognition, IEEE Trans. on Knowledge Data and Engineering, IEEE Trans. on Evolutionary Computation, IEEE Trans. on Neural Networks, ACM Computing Reviews, Data & Knowledge Engineering, BMC Bioinformatics, Artificial Intelligent Reviews, BMC Genomics, BioData Mining, among others.

I have also served as project evaluator for the European Commission, and for State Research Programs of Spain, Netherlands, Argentina, Ireland, Republic of South Africa, Czech Republic, Croatia, and France.

C.5. Research projects

As PI of Coordinated Projects:

- Modelos avanzados en Minería de Datos: aplicación biomédica y medioambiental. TIN2011-28957-C02. Ministerio de Economía y Competitividad. 2011-2015.
- Modelos Avanzados en Minería de Datos: escalabilidad y aplicación biológica. Ministerio de Educación y Ciencia TIN 2007-68084-C02-01, 2008-2010.

As PI:

- Explainable Class-specific-based Multiclass Classification, MICIN PID2023-152660NB-I00, 2024-2027.
- Kernel Density Estimation-based Data Analytics. MICINN PID2020-117759GB-I00, 2021-2024.
- Big Data-driven strategies for mobility in Smart Cities. 2019-2021.
- Diseño de un modelo conceptual de Smart City para la integración de sistemas sectoriales en ámbitos inteligentes, 2018-2020.
- Análisis inteligente de información biomédica. MICINN TIN2011-28956-C02-01.
- Sistemas inteligentes para descubrir patrones de comportamiento. Aplicación a bases de datos biológicas. Junta de Andalucía, P07-TIC-02611, 2007-2012.
- Metodologías computacionales emergentes en bioinformática. Junta de Andalucía, PCI2006-A7-0575, 2008-2012.
- NATO Security Through Science: Advanced Data- and Knowledge-Driven Methods for State Failure Risk Assessment. Coordinator: Francisco Azuaje. PI in Spain: Jesús S. Aguilar-Ruiz (supported by North Atlantic Treaty Organization), 2004-2006.
- Integrated Action HP2004-0044: Mining Data Streams. 2007-2011.

As Research Team member:

- Smart Mobility Arequipa (SMARQ): diseño conceptual de los servicios de movilidad urbana con tecnologías avanzadas de IA, 2020-22.
- Big Data Streaming: Análisis de datos masivos continuos. Modelos Predictivos. Proyectos I+D Retos. TIN2017-88209-C2-1-R.
- Big Time-Aware Data: Análisis de Datos Masivos Indexados en el Tiempo. Min. de Economía y Competitividad. Proyectos I+D Excelencia. TIN2014-55894-C2-R. 2014-17.
- MINería de DATos Para Los USuarios en diferentes áreas de aplicación (MINDAT-PLUS). Entidad financiadora: Junta de Andalucía. 2006-08. Investigador principal: F. Herrera (U. de Granada).
- HERCULES: Heurísticas Escalables para la Extracción de Conocimiento en Grandes Volúmenes de Información. MEC TIN 2007-68084-C02-02.

- MINERVA: Técnicas emergentes de minería de datos para la extracción de conocimiento de grandes volúmenes de información: aplicación a datos científicos e industriales. MEC TIN2004-00159.
- Definición y diseño de un sistema de métricas para la valoración y estimación de proyectos de Ingeniería del Software. CICYT TIC2001-1143-C03-02.
- Acciones complementarias Red Española de Minería de Datos y Algoritmos. MICINN TIN2010-09163-E, MEC TIN2006-27675-E, MEC TIN2004-21343-E, CICYT TIC2002-11124-E.
- Predicción de la producción de energías renovables para su integración en redes de distribución, PAI-2003/032. Junta de Andalucía. IP: Antonio Gómez Expósito.
- Knowledge Discovery Network of Excellence, IST-2001-33086, European Union. Coordinador (Fraunhofer Institute).

C.6. Research visits

- Visiting Researcher, Swiss Data Science Center, ETH Zurich, Switzerland, 2019.
- Visiting Professor, National Institute of Genetics, The DNA Database of Japan, 2009.
- Visiting Professor, University of Bologna, Italy, 2008.
- Visiting Professor, University of Massachusetts, Boston, US, 2005.
- Visiting Professor, University of Massachusetts, Boston, US, 2004.
- Visiting Professor, University of Massachusetts, Amherst, US, 2003.
- Postdoc, University of Reading, UK, 2002.

C.7. Invited Talks

I have been invited to participate in PhD Programs, Master Programs, Seminars, Conferences and Summer Courses in different countries: Instituto Politécnico Nacional, México; University of Las Villas, Santa Clara, Cuba; University of Seville; University of Huelva; National University of San Agustin, Arequipa, Perú; , University of Reading, Reading, UK; Universidad de Castilla La Mancha; , Royal Statistical Society, London, UK; University of Massachusetts, Boston, US; University of Massachusetts, Amherst, US; European Workshop on Data Stream Analysis, Caserta, Naples, Italy; 38th French Conference in Statistics, Paris, France; University of the Basque Country.

C.8. Contracts, technological or transfer merits

- Ingeniería de Sistemas para la Defensa de España S.A.: Data Analytics, 2019-20, 2021, 2023.
- EasyLeapp: Technological consulting, 2019.
- EC2CEE: Consulting on Data Analytics for Precision Agriculture, 2018.
- TB-SOLUTIONS - R&D Contract for CENIT project: Intelligent System for Intermodal Freight Transport.
- Pixelware S.A. – R&D contract for TSI-020602-2012-198 del Subprograma de Competitividad I+D, convocatoria de ayudas Acción Estratégica de Telecomunicaciones y Sociedad de la Información, Ministerio de Industria, Energía y Turismo.
- Proemia Advanced Technologies S.L. Technological consulting.
- PRIDEA 2013 S.L. – Development of software for text mining.