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Short Curriculum Vitae

I. Professional data

Affiliation: Department of Computer Science and Numerical Analysis. University of Córdoba.
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II. Education

- B.S. Degree in Chemistry 1989 (University of Córdoba)
- PhD Degree in Sciences 1996 (University of Córdoba)
Dissertation title: Design of Artificial Neural Networks in Kinetic Methods.
Advisors: Cesar Hervás (Department of Computer Sciences, University of Córdoba)
Manuel Silva (Department of Analytical Chemistry, University of Córdoba)
Dolores Pérez-Bendito (Department of Analytical Chemistry, University of Córdoba)

III. Teaching Experience

Since 1998 is Associate Professor on Computer Science and Artificial Intelligence in the University of Córdoba.

1996-1998 – Assistant Professor. Department of Computer Science and Numerical Analysis. University of Córdoba

1991-1998 – Secondary Education Teacher.

IV. Experience in other scientific-academic management positions

- Head of the Department of Computer Science and Numerical Analysis (University of Cordoba). December 2002 – December 2007.
- Affiliated Professor. Department of Computer Science. Virginia Commonwealth University (Ritchmond, Virginia, USA). August 2008 – August 2011.

V. Research experience

Professor Ventura has been director or responsible of research in the following national (Spanish) projects:

- *Actual tendencias and New Challenges in KEEL: Multi-Instance Learning, Evolutionary Neural Networks, Educational Data Mining and Web Data Mining*. Project TIN2008-06681-C06-03/TIN (Ministerio de Educación y Ciencia). From 2009/1/1 to 2011/12/31.
- *Aplicación de Técnicas de Extracción de Conocimiento a la Mejora de los Sistemas Educativos (ATECSE). Proyecto de Excelencia (Junta de Andalucía)*. From 2009/1/14 to 2012/1/13.

VI. Other scientific activities

- General chair. 2nd International Conference on Educational Data Mining (EDM 2009).
- Local committee. III Congreso Español de Algoritmos Evolutivos y Bioinspirados (MAEB'04).
- Program committee. I Congreso Español de Algoritmos Evolutivos y Bioinspirados (MAEB'02).
- Program committee. II Congreso Español de Algoritmos Evolutivos y Bioinspirados (MAEB'03).
- Program committee. III Congreso Español de Algoritmos Evolutivos y Bioinspirados (MAEB'04).
- Program committee. IV Congreso Español de Algoritmos Evolutivos y Bioinspirados (MAEB'05).
- Program committee. V Congreso Español de Algoritmos Evolutivos y Bioinspirados (MAEB'07).
- Program committee. VI Congreso Español de Algoritmos Evolutivos y Bioinspirados (MAEB'09).
- Program committee. Jornadas de Algoritmos Evolutivos y Metaheurísticas JAEM (CEDI2007).
- Program committee. WWW/Internet 2006.
- Program committee. WWW/Internet 2007.
- Program committee. WWW/Internet 2008.
- Program committee. WWW/Internet 2009.
- Program committee. CORE 2007.
- Program committee. CORE 2008.
- Program committee. 1st International Conference on Educational Data Mining (EDM 2008).
- Program committee. 2nd International Conference on Educational Data Mining (EDM 2009).
- Program committee. 8th International Conference on Hybrid Intelligent Systems (HIS 2008).
- Program committee. 9th International Conference on Hybrid Intelligent Systems (HIS 2009).
- Program committee. 8th International Conference on Intelligent Systems Design and Applications (ISDA 2008).
- Program committee. 9th International Conference on Intelligent Systems Design and Applications (ISDA 2009).
- Program committee. 4th International Conference on Internet and Web Applications and Services (ICIW 2009).
- Program committee. IEEE World Congress on Computational Intelligence (WCCI 2008).
- Program committee. World Congress on Nature and Biologically Inspired Computing (NaBIC 2009).
- Program committee. The Fourth International Conference on Internet and Web Applications and Services (ICIW 2009).
- Program committee. Genetic and Evolutionary Computation Conference (GECCO 2009).
- Program committee. Fourth International Conference on Hybrid Artificial Intelligent Systems (HAIS 2009)

- Program committee. Conferencia Conjunta Iberoamericana sobre Tecnologías para el Aprendizaje (CCITA 2009).

VII. Editorship activity

- Coeditor of the book “*Actas del III Congreso de Algoritmos Evolutivos y Bioinspirados, MAEB’04*”.
- Coeditor of the book “*Data Mining and e-learning*”, WIT Press, 2006.
- Editorial board member of the “International Journal of Data Analysis Techniques and Strategies” journal since 2008.
- Editorial board member of the “International Journal of Information Systems and Social Change” journal since 2008.
- Editorial board member of the “Journal of Educational Data Mining” since 2008.
- Referee of the “Soft Computing” journal since 2006.
- Referee of the “User Modelling and User Adapted Interaction” journal since 2006.
- Referee of the “Chemistry Engineering Science” journal since 2007.
- Referee of the “Data Knowledge Engineering” journal since 2008.

VIII. Publications

- Is advisor of one Ph. D.

- Cristóbal Romero Morales. “Applying Knowledge Discovery Techniques to Improve Web-Based Adaptive Hypermedia Courses”. University of Granada, 2005.

- Is co-editor of two books on topics of his specialty

- C. Romero and S. Ventura: *Data Mining in e-Learning*. WIT Press (2006).
- C. Romero, S. Ventura, S.R. Viola, M. Pechenisky & R.S. de J. Baker: *Educational Data Mining Handbook*. CRC Press (to appear)

- By the present time he has published

- 35 scientific papers in refereed journals, 15 of them are in publications of the ISI catalogues.
- 60 papers in books (proceedings of conferences and edited books)

List of most relevant publications is Appendix 1.

IX. Awards and International rankings

H index: 8 (source: Thomson Web of Science)
8 (source: Elsevier SCOPUS)

G index: 14 (source: Thomson Web of Science)
14 (source: Elsevier SCOPUS)

R index: 13.077 (source: Thomson Web of Science)
13.229 (source: Elsevier SCOPUS)

- Profesor Antonio Hidalgo award to the paper, "*Uso de redes neuronales en la estimación de parámetros analíticos cinéticos*" (best conference paper). Séptimas jornadas de análisis instrumental, Madrid, 1995.

X. Areas of interest

- Data, Web and Text Mining
- Soft Computing, Evolutionary Computing
- Application of Data Mining to Educational Data

APPENDIX

List of the most relevant publications

Books

- [1] C. Romero and S. Ventura (editors). Data Mining in e-Learning. WIT Press (2006).

Articles

- [1] C. Romero, S. Ventura, P. de Bra. Using Mobile and Web-based Computerized Test for Evaluating University Students. *Computer Applications in Engineering Education*, 2008 (In press).
- [2] E. García, C. Romero, S. Ventura & C. de Castro. An architecture for making recommendations to courseware authors through association rule mining and collaborative filtering. *User Modelling and User Adapted Interaction*, 19(1-2), 99-132, 2009.
- [3] C. Romero, P. González, S. Ventura, M.J. del Jesus & F. Herrera. Evolutionary Algorithms for Subgroup Discovery in e-Learning: A practical Application using MOODLE Data. *Expert Systems with Applications*, 36(2), 1632-1644, 2009.
- [4] J. Alcalá, L. Sánchez, S. García, M.J. del Jesus, S. Ventura, J.M. Garrell, J. Otero, C. Romero, J. Bacardit, V. Rivas & F. Herrera. KEEL: A data mining software tool for assessing the performance of knowledge extraction-based on evolutionary algorithms. *Soft Computing*, 13(3), 307-318, 2009.
- [5] C. Romero, S. Ventura & E. García. Data Mining in Course Management Systems: MOODLE Case Study and Tutorial. *Computers and Education*, 51(1), 368-384, 2008.
- [6] S. Ventura, C. Romero, A. Zafrá, J.A. Delgado & C. Hervás. JCLEC: A Java Framework for Evolutionary Computation. *Soft Computing*, 12(4), 381-392, 2008.
- [7] C. Romero & S. Ventura. Educational Data Mining: A Survey from 1995 to 2005. *Expert Systems with Applications*, 33(1), 135-146, 2007.
- [8] C. Romero, S. Ventura, E. Gibaja, C. Hervás & F. Romero. Web-Based Adaptive Training Simulator System for Cardiac Life Support. *Artificial Intelligence in Medicine*, 38(1), 67-78, 2006.
- [9] C. Romero, S. Ventura & P. de Bra. Knowledge Discovery with Genetic Programming for Providing Feedback to Courseware Authors. *User Modelling and User Adapted Interaction*. 15(5), 425-464, 2004.
- [10] S. Ventura, C. Hervás & J.A. Martínez. Reconocimiento de Funciones de Producción Láctea mediante Redes Neuronales Podadas y Entrenadas con un Algoritmo Genético. *Inteligencia Artificial*, 2(5), 32-38, 1998.
- [11] S. Ventura, M. Silva, M.D. Pérez & C. Hervás. Computational Neural Networks in Conjunction with Principal Component Analysis for Resolving Nonlinear Multicomponent Systems based on Chemiluminescence Methods. *Journal of Chemical Information and Computer Sciences*, 38, 1119-1124, 1998.
- [12] S. Ventura, M. Silva, M.D. Pérez & C. Hervás. Estimation of Parameters of Kinetic Compartmental Models by use of Computational Neural Networks. *Journal of Chemical Information and Computer Sciences*, 37, 517-521, 1997.
- [13] S. Ventura, M. Silva, M.D. Pérez & C. Hervás. Computational Neural Networks in Conjunction with Principal Component Analysis for Resolving Highly Nonlinear Kinetics. *Journal of Chemical Information and Computer Sciences*, 37, 287-292, 1997.
- [14] S. Ventura, M. Silva, M.D. Pérez & C. Hervás. Multicomponent Kinetic Determinations using Artificial Neural Networks. *Analytical Chemistry*, 67, 4458-4462, 1995.
- [15] S. Ventura, M. Silva, M.D. Pérez & C. Hervás. Neural Network for Estimation of Kinetic Analytical Parameters. *Analytical Chemistry*, 67, 1521-1526, 1995.