

## CURRENT POSITION

Research assistant professor at La Salle - URL.

Assistant executive director of the Research Group in Intelligent Systems, La Salle - URL.

## EDUCATION

**PhD in Computer Engineering**, La Salle - URL, 2004 – 2008. *Dissertation Title*: “New Challenges in Learning Classifier Systems: Mining Rarities and Evolving Fuzzy Models” (Excellent Cum Laude) [preprint] [slides preprint]. *Examining Committee*: David E. Goldberg, Francisco Herrera, Martin V. Butz, Xavier Llorà, and Xavier Vilasís. **Extraordinary reward to the best thesis.**

**MS in Computer Engineering**, La Salle - URL, 2002 – 2004 (A with honors, best student of the promotion).

**BS in Computer Engineering**, La Salle - URL, 1999 – 2002 (A with honors, best student of the promotion).

## ACADEMIC EXPERIENCE

Qualified as lecturer by the “Agència Catalana d’Universitats” with expedient number U1443/9075811-81.

Design, implementation and coordination of the Master program *Master in data mining applied to medicine*, La Salle - URL (2009 – present).

Design, implementation and coordination of the postgraduate course *iPhone programming*, La Salle - URL (2010 – present).

Teaching different subjects in the BS, MS, and PhD program, La Salle - URL (2003 – present). In particular, I have taught *Machine Learning* (PhD program, 2009 – present), *Artificial Intelligence* (MS program, 2008 – present), *Advanced Programming* (BS program, 2008 – present), and *Data structures* (BS program, 2003 – 2008).

Supervisor of Master Thesis, La Salle - URL (2003 – present).

## PARTICIPATION IN RESEARCH PROJECTS

**INTEGRIS** — INTelligent Electrical Grid Sensor communications, funded by European Commission with reference 247938, (2010 – present).

**KEEL III** – Genetic-based machine learning, data complexity, unbalanced domains, data streams, and scalability, funded by *Ministerio de Educación y Ciencia* with reference TIN2008-06681-C06-05, (2009 – present).

**KEEL II** – Rule-based Evolutionary Models, funded by *Ministerio de Educación y Ciencia* with reference TIN2005-08386-C05-04, (2005 – 2008).

**KEEL** – Knowledge Extraction with Evolutionary Learning, funded by *Ministerio de Ciencia y Tecnología* with reference TIC2002-04036-C05-03, (2002 – 2005).

## PARTICIPATION IN ADVISORY BOARDS

Technology advisor of **SecuriForest**, (2009 – present).

## RESEARCH EXPERIENCE

Member of the Research Group in Intelligent Systems (**GRSI**), La Salle - URL, (2001 – present).

Member of the Illinois Genetic Algorithm Laboratory (**ILLIGAL**), University of Illinois at Urbana-Champaign, (2006 – present).

Research visitor of the Soft Computing and Intelligent Information Systems (**SCI2s**), Universidad de Granada, (2006 – 2008).

## AWARDS & GRANTS

- **Extraordinary reward to the best thesis** in the PhD program *Communication and Information Systems and its Management* of the Ramon Llull University.
- **Best paper awards** in the conferences ESTYLF 2008 and GEFS 2008.
- **Beca BE (2008)** with ref. 2007BE-200124 and **Beca BE (2006)** with ref. 2006BE-00299.
- **Grant *fundación Rafael Escolá a la Excelencia Universitaria* (2005)**. Grant given to the three best engineers of the year in Spain.
- **Beca FI (2004 – 2008)** with reference 2005FI-00252. Scholarship for formation of researchers.
- **Becas líder de inmersión a la realidad social española (July 2004)**. Fellowship granted to the 8 best Spanish students across all degrees.
- **Beca colaboración (2003)**. Scholarship to fund the collaboration of a last-year student with a research group of the University. Funded by *Ministerio de Ciencia, Cultura y Deporte*.
- **Beca universitaria de la Caixa de Manresa (1999 & 2000)**. Scholarship given to the best students of the year in Catalonia.

## SELECTED PUBLICATIONS

**Summary:** coauthored 1 book • 8 referred journal papers • 7 chapters in LNCS/LNAI books • 7 book chapters • 18 referred conference papers • 2 national conference papers • *h-index* 8 • *g-index* 12 • *total citations* 188.

**Albert Orriols-Puig**, Ester Bernadó-Mansilla, David E. Goldberg, Kumara Sastry, Pier Luca Lanzi. *Facetwise Analysis of XCS for Problems with Class Imbalances*. IEEE TEC, volume 13, number 5, pages 1093 - 1119, 2009, (ISI index = 3.77), ISSN 1089-778X [preprint].

**Albert Orriols-Puig**, Jorge Casillas and Ester Bernadó-Mansilla. *Fuzzy-UCS: A Michigan-style Fuzzy-Learning Classifier System for Supervised Learning*. IEEE TEC, volume 13, number 2, pages 260–283, 2009, (ISI index = 3.77), ISSN 1089-778X [preprint].

**Albert Orriols-Puig**, Jorge Casillas, and Francisco J. Martínez-López. *Unsupervised Learning of Fuzzy Association Rules for Consumer Behavior Modeling*. Mathware and Soft Computing, volume 16, pages 29–43, 2009, ISSN 1134-5632 [preprint].

Guiomar Corral, Alvaro Garcia-Piquer, **Albert Orriols-Puig**, Albert Fornells, and Elisabet Golobardes. *Multiobjective Evolutionary Clustering Approach to Security Vulnerability Assessments*. In Proceedings of the 2009 International Workshop on Hybrid Artificial Intelligence Systems (HAIS'09), LNAI series, volume 5572/2009, pages 597–604, Springer, 2009 [preprint].

Ester Bernadó-Mansilla, Tin K. Ho and **Albert Orriols-Puig**. *Data Complexity and Evolutionary Learning: Classifier's Behavior and Domain of Competence*. Data Complexity, pages 115-124. Springer, ISBN 978-1-84628-171-6, 2006 [preprint].

## RELEASED SOURCE CODE

**Extended compact genetic algorithm in Matlab.**

Source: <http://www.illigal.uiuc.edu/pub/src/ECGA/eCGAmatlab.zip>

**Data complexity library in C++.** Source: <http://dcol.sourceforge.net>

**The extended classifier system (XCS),** Source: <http://www.keel.es>.

**The supervised classifier system (UCS)** Source: <http://www.keel.es>.

## LANGUAGES

Catalan (native), Spanish (native) & English: Reading, speaking, and writing very well.

The long version of this CV is available at <http://www.albertorriols.net/Files/Papers/CV/CVaorriols-long.pdf>.