

CV – Fernando Orejas

Personal Data

Name: Fernando Orejas

Born: Sept. 1, 1952

Affiliation: Dept de Llenguatges i Sistemes Informàtics (LSI). Univ. Politècnica de Catalunya (UPC)

Education

- Universidad Complutense de Madrid 1974, Graduated (Licenciado) in Mathematics
- Universidad Complutense de Madrid 1980, PhD in Mathematics

Teaching and Research Appointments

- Univ. Complutense de Madrid, Fac. Matemáticas (1974–80) Assistant
- Univ. Politècnica Catalunya (1980–87), Fac. Informàtica. Assoc. Professor
- Univ. Politècnica Catalunya (1987–), Fac. Informàtica. Full Professor (Catedrático)

Administrative Appointments

- Director of the Dept LSI. 1996 – 2002

Visiting appointments:

- Lab. d'Informatique Theorique et Programmation de Paris. Sept. 1981.
- Centre de Recherche en Informatique de Nancy. March-July 1984.
- Ecole Normal Superieur de Paris. May 1993.
- Tech. Univ. Berlin. May – June 2002.
- Tech. Univ. Berlin. Sept. - Dec. 2008.
- Ludwig-Maximilians Univ. Munich. Jan. - April 2009.
- Univ. of Leicester May - July 2009.

Research interests

Formal methods, Specification, Graph Transformation, Logic Programming.

Research Grants (last 5 years)

- MAVERISH (ref. TIC2001-2476-C03-01), Spanish funded project. 2001-04. Project leader.
- CORDIAL II (, ref. AML/B7-311-97/0666/II-0021-FA). EU Alfa Project. 2001-05. Coordinator of the project
- Segravis (RTN2-2001-00346). EU Research Training Network. 2002-05. Site leader.
- GRAMMARS (ref. TIN2004-07925-C03-01), Spanish funded project. 2005-07. Project leader.
- FORMALISM (ref. TIN2007-66523), Spanish funded project. 2007-11. Project leader.

PhD students

Pere Botella (1982), Albert Llamós (1982), Ricardo Peña (1984), Pilar Nivelá (1987), Marisa Navarro (1987), Federico Valenciano (1987), Robert Nieuwenhuis (1990), Ana Sánchez (1993), Elvira Pino (1999), Nikos Mylonakis (2000), Sonia Pérez Lovelle (2007), Edelmira Pasarella (2008).

Other Activities:

- Invited lectures at TAPSOFT 2005 (Berlin), MFCS 1994 (Kosice), WADT 1991 (Dourdan), VT-GMT 2010 (Cyprus) .
- Steering Committee member of TAPSOFT (1990-96), ETAPS (1996-01, 2002-05, and 2010-2012), WADT (since 1995), ICGT (since 2001), CALCO (since 2004).
- Program Committee co-Chair of TAPSOFT (1989), ICALP (2001) and FASE 2011, and member of the program committees (in one or more occasions) of many conferences including ICALP, ESOP, ESEC, MFCS, CAAP, ALP, AMAST, FME, FM, FASE, ICGT, CALCO, PPDP and others.
- Guest editor for special issues of the journals Theoretical Computer Science, Mathematical Structures in Computer Science, Journal of Logic and Algebraic Programming, Fundamenta Informaticae.
- Main organizer of WADT 92, ICGT 2002, ETAPS 2004 and other smaller meetings.
- Founding member of the IFIP W.G. 1.3 on Foundations of System Specification.
- National representative in the council of the Europ. Assoc. for Software Sc. and Techn.

- Reviewer for several institutions and agencies: EU (ESPRIT and IST), European Science Foundation, British Agency, Portuguese Agency, Argentinian Agency, Spanish Agency. Reviewer of three projects in the Global Computing initiative (FP5).
- Served in Ph D. Committees in Spain (many universities) France (Nancy, Paris), Germany (TU Berlin), Belgium (Namur), Norway (Bergen).
- President of the Committee for the Accreditation of University staff on the areas of Engineering and Architecture of the Spanish National Accreditation Agency (ANECA) (2006-2011).
- Member of the University Senate (Consejo de Gobierno) of the Univ. Politècnica Catalunya (1990-94, 1998-01, and 2007-2009).

Some recent publications:

Esther Guerra, Juan de Lara and Fernando Orejas, Inter-modelling with patterns. Accepted in *Software and System Modelling* (online since Feb. 2011)

Dimitra Giannakopoulou, Fernando Orejas (Eds.): *Fundamental Approaches to Software Engineering - 14th International Conference, FASE 2011, Held as Part of the Joint European Conferences on Theory and Practice of Software, ETAPS 2011*, Saarbrücken, Germany, March 26-April 3, 2011. Proceedings Springer 2011

Fernando Orejas Symbolic Graphs for Attributed Graph Constraints, *Journal of Symbolic Computation*. 46(3): 294-315 (2011)

Fernando Orejas, Hartmut Ehrig, Ulrike Prange: Reasoning with Graph Constraints. *Formal Aspects of Computing*, (3-4): 385-422 (2010)

Muhammad Naeem, Reiko Heckel, Fernando Orejas, Frank Hermann: Incremental Service Composition Based on Partial Matching of Visual Contracts, in *Fundamental Approaches to Software Engineering, 13th International Conference, FASE 2010*, Springer Lecture Notes in Computer Science 6013 (2010), 123-138.

Fernando Orejas, Hartmut Ehrig, Markus Klein, Julia Padberg, Elvira Pino, Sonia Pérez: A Generic Approach to Connector Architectures Part I: The General Framework. *Fundam. Inform.* 99(1): 63-93 (2010)

Fernando Orejas, Hartmut Ehrig, Markus Klein, Julia Padberg, Elvira Pino, Sonia Pérez: A Generic Approach to Connector Architectures Part II: Instantiation to Petri Nets and CSP. *Fundam. Inform.* 99(1): 95-124 (2010)

Joxe Gaintzarain, Montserrat Hermo, Paqui Lucio, Marisa Navarro, Fernando Orejas: Dual Systems of Tableaux and Sequents for PLTL. *J. Log. Algebr. Program.* 78(8): 701-722 (2009)

F. Orejas, M. Wirsing, On the specification and verification of model transformations. en *Semantics and Algebraic Specification, Essays Dedicated to Peter D. Mosses on the Occasion of His 60th Birthday*, Jens Palsberg (Ed.), Springer Lecture Notes in Computer Science 5700 (2009), 140-161.

Esther Guerra, Juan de Lara, Fernando Orejas, Pattern-Based Model-to-Model Transformation: Handling Attribute Conditions. In *Theory and Practice of Model Transformations, Second International Conference, ICMT 2009*, Springer Lecture Notes in Computer Science 5563 (2009), 83-99.

F. Orejas, H. Ehrig, U. Prange, A Logic of Graph Constraints, in *Fundamental Approaches to Software Engineering, 11th International Conference, FASE 2008*, Springer Lecture Notes in Computer Science 4961 (2008), 179-199.

Fernando Orejas: Attributed Graph Constraints. In *Graph Transformations, 4th International Conference*, Springer Lecture Notes in Computer Science 5214 (2008): 274-288.

Leen Lambers, Hartmut Ehrig, Ulrike Prange, Fernando Orejas: Embedding and Confluence of Graph Transformations with Negative Application Conditions. *Graph Transformations, 4th International Conference*, Springer Lecture Notes in Computer Science 5214 (2008): 162-177.

Paqui Lucio, Fernando Orejas, Edelmira Pasarella, Elvira Pino: A Functorial Framework for Constraint Normal Logic Programming, *Applied Categorical Structures* 16,3 (2008): 421 - 450.