

Curriculum Vitae

Personal Information

Lidia Fuentes is Full Professor in Telematic Engineering at the Department of Computer Science of the University of Málaga, and member of the ITIS Research Center (*Centro Andaluz de Investigación en Tecnologías Informáticas*, http://www.uma.es/adabyron?set_language=en).

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Education and Work Experience

- From 2011, Full Professor at the Department of Lenguajes y Ciencias de la Computación, University of Málaga (permanent position)
- 2001 – 2011, Associate Professor at the same department
- 1993- 2001, Assistant Professor at the same department
- 1998, PhD in Computer Science at the University of Málaga
- 1992 – 1993, Computer analyst and programmer, Coritel.
- 1989 – 1992, MsC in Computer Science at the University of Málaga

Management Positions

- From November 2017, Coordinator of a Master course about “Software Engineering and Artificial Intelligence” (ISIA, Ingeniería del Software e Inteligencia Artificial).
- From June 2016, Member of the National Committee for the Evaluation of applicants to access civil-servant academic staff bodies (ANECA), Ministry of Education (Spain).
- From February 2015, Member of the National Committee for the Evaluation of the Research Activity of Spanish Professors (CNEAI), Ministry of Education (Spain).
- From February 2011, Coordinator of the Andalusian Research Activity in Computer Science (AAC).
- From 2015 – 2019 , member of the Steering Committee of Aspect-Oriented Software Association (AOSA)
- Sub-director of Research at the Department Lenguajes y Ciencias de la Computación, 2004 – 2008
- She is currently the head of the CAOSD research group (<http://caosd.lcc.uma.es>) that currently has 10 members.
- She is also a member of the editorial board of the journal International Journal of Ambient Computing and Intelligence (IJACI).

Research interests

Her research interests deal with the application of advanced Software Engineering technologies such as Software Product Lines, Model-Driven Development, Aspect-Oriented Software Development, Software Agents, Security, and Component-based middleware, to the Ambient Intelligence and Internet of Things domains. In last years she has focused on the development of self-adaptive systems for Future Internet. Now we are interested in green software engineering.

Publications

Her scientific production has been very prolific so far, with more than **two hundred scientific publications** in international forums, highlighting around **forty publications indexed in JCR** such as IEEE Internet Computing, IEEE Software, IEEE Transactions on SW Engineering, Information and Software Technology, Journal of Systems and Software, Sensors or ACM Computer Surveys. These publications are highly cited, with more than two thousand citations to date. Her **H-index is 26** (Google Scholar). She has co-authored three papers that have received the best-paper award of prestigious conferences (MATES, ICSR and ECMDA), and co-authored around **thirty papers with eleven international groups**. Some co-authors include Awais Rashid (U. Lancaster, UK), Steffen Zschaler (King's College), Ana Moreira (UNL, Portugal), and Siobhán Clarke (TCD, Ireland).

Most outstanding journal publications in last 5 years (10 papers):

1. José-Miguel Horcas, Mónica Pinto, Lidia Fuentes, Wissam Mallouli, Edgardo Montes de Oca: An approach for deploying and monitoring dynamic security policies. *Computers & Security* 58: 20-38 (2016)
2. Gustavo G. Pascual, Roberto E. Lopez-Herrejon (*Johannes Kepler University*), Mónica Pinto, Lidia Fuentes, Alexander Egyed (*Johannes Kepler University*): Applying multiobjective evolutionary algorithms to dynamic software product lines for reconfiguring mobile applications. *Journal of Systems and Software* 103: 392-411 (2015)
3. Inmaculada Ayala, Mercedes Amor, Lidia Fuentes: The Sol agent platform: Enabling group communication and interoperability of self-configuring agents in the Internet of Things. *JAISE* 7(2): 243-269 (2015)
4. GG Pascual, M Pinto, L Fuentes, Self-adaptation of mobile systems driven by the Common Variability Language, *Future Generation Computer Systems*, 2015
5. M Pinto, N Gámez, L Fuentes, M Amor, JM Horcas, Dynamic Reconfiguration of Security Policies in Wireless Sensor Networks - *Sensors*, 2015
6. Inmaculada Ayala, Mercedes Amor, Lidia Fuentes: A model driven engineering process of platform neutral agents for ambient intelligence devices. *Autonomous Agents and Multi-Agent Systems* 28(2): 214-255 (2014)
7. Nadia Gámez, Lidia Fuentes: Architectural evolution of FamiWare using cardinality-based feature models. *Information & Software Technology* 55(3): 563-580 (2013)
8. Mónica Pinto, Lidia Fuentes, Luis Fernández: Deriving detailed design models from an aspect-oriented ADL using MDD. *Journal of Systems and Software* 85(3): 525-545 (2012)
9. Mónica Pinto, Lidia Fuentes, José María Troya Linero: Specifying aspect-oriented architectures in AO-ADL. *Information & Software Technology* 53(11): 1165-1182 (2011)
10. Nadia Gámez, Lidia Fuentes: FamiWare: a family of event-based middleware for ambient intelligence. *Personal and Ubiquitous Computing* 15(4): 329-339 (2011)

Most outstanding conference publications in last 5 years (10 papers):

1. Nadia Gamez, Joyce El Haddad (*University of Paris-Dauphine FR*), Lidia Fuentes, PL-TQSSS: A Software Product Line approach for Stateful Service Selection, ICWS 2015 (CORE A).
2. Javier Cubo, Nadia Gamez, Ernesto Pimentel, Lidia Fuentes, Reconfiguration of Service Failures in DAMASCo using Dynamic Software Product Lines, SCC 2015 (CORE A).
3. Jose Miguel Horcas, Mónica Pinto, Lidia Fuentes: Injecting quality attributes into software architectures with the common variability language. CBSE 2014: 35-44 (CORE A).

4. Jose Miguel Horcas, Mónica Pinto, Lidia Fuentes: Runtime Enforcement of Dynamic Security Policies. ECSA 2014: 340-356 (CORE A).
5. Gustavo G. Pascual, Mónica Pinto, Lidia Fuentes: Run-Time Support to Manage Architectural Variability Specified with CVL. ECSA 2013: 282-298 (CORE A).
6. Gustavo G. Pascual, Mónica Pinto, Lidia Fuentes: Run-time adaptation of mobile applications using genetic algorithms. SEAMS 2013: 73-82
7. Gustavo G. Pascual, Mónica Pinto, Lidia Fuentes: Automatic Analysis of Software Architectures with Variability. ICSR 2013: 127-143 (CORE A)
8. Javier Cubo, Nadia Gámez, Lidia Fuentes, Ernesto Pimentel: Composition and Self-Adaptation of Service-Based Systems with Feature Models. ICSR 2013: 326-342 (CORE A)
9. Paulo F. Pires (*Rio de Janeiro University*), Flávia Coimbra Delicato (*Rio de Janeiro University*), Mónica Pinto, Lidia Fuentes, Éberton Marinho: Software evolution in AOSD: a MDA-based approach. CBSE 2011: 193-198 (CORE A)
10. Nadia Gámez, Lidia Fuentes: Software Product Line Evolution with Cardinality-Based Feature Models. ICSR 2011: 102-118 (**BEST PAPER**) (CORE A)

A complete list of publications is publicly available at Google Scholar site <https://scholar.google.es/citations?user=sLm8YSIAAAAJ&hl=es> and also at the ORCID web site <http://orcid.org/0000-0002-5677-7156>

Research projects as Principal Investigator

She leads and actively participates in several EU (4 projects in last five years) and National research projects (6 projects in last five years)

Most Recent European Projects:

- INTER-TRUST (Interoperable Trust Assurance Infrastructure), 2012 - 2015
- AMPLE (Aspect-Oriented, Model-Driven, Product Line Engineering), 2006 - 2009
- AOSD-Europe (European Network of Excellence on Aspect Oriented Software Development) 2004 - 2008

Conference Organization and Programme Committee member

- General Chair of Modularity 2016 (<http://2016.modularity.info/>).
- AOSD/Modularity Conference (2005, 2006, 2009, 2013 and 2014)
- SEAA-Workshop DANCE: International workshop on Distributed Architecture modeling for Novel Component based Embedded systems (DANCE 2011)
- Fifth International Conference on COMmunication System softWARE and middlewaRE (COMSWARE 2011)
- Model Driven Engineering, Languages and Systems (MODELS 2009, 2010)
- Ubiquitous and Ambient Intelligence conference (UCAmI 2005 until now)
- Brazilian Conference on Software: Theory and Practice (CBSOFT 2010, 2011, until now)
- International workshop of Ambient Assisted Living (IWAAL 2009, 2011)
- Workshop on Partial Evaluation and Program Manipulation (PEPM 2009, PEPM 2011)
- 4th Summer School on Generative and Transformational Techniques in Software Engineering (GTTSE 2009)
- Workshop on Next Generation Aspect Oriented Middleware (NAOMI 2008)
- Object-Oriented Programming Systems, Languages, and Applications (OOPSLA 2007)
- International Workshop on Early Aspects (co-located with AOSD 2007 and 2008)
- Generative Programming and Component Engineering (GPCE 2007 and 2008)

- International Conference on the Quality of Information and Communications Technology (QUATIC 2007)
- TOOLS EUROPE 2007 - Objects, Models, Components, Patterns (Workshop Committee)
- International Workshop on Model-based Methodologies for Pervasive and Embedded Software (MOMPES 2007 and 2008)
- Workshop Aspect-Oriented Product Line Engineering (AOPLE'06)
- Intl. Conf. on Innovative Views of .NET Technologies (ivNet 2006)
- Iberoamerican Workshop on Multi-Agent Systems (IBERAGENTS'2006 and 2004)
- Early Aspects workshop co-located with OOPSLA
- Principles and Practice of Programming in Java (PPPJ 2003 and 2004)

Registered tools

She supervised the development of some products registered in the Spanish Intellectual Property Office:

- iMuseumA, an Android agent-based application for museum management (visitors, tourist guides and security staff)
- AO-ADL Tool Suite (specification of aspect-oriented architectures and metrics)
- Populo (simulation of UML models with action semantic)
- FamiWare (a development process of an AmI middleware product line with reconfiguration)
- Hydra (a tool for specifying feature models with clonable features).

Teaching

Regarding her teaching activities, she has a vast experience at the University of Málaga where she has been teaching in Degree and Master Courses for more than 20 years. She also teaches regularly in English subjects about Network and Distributed Systems and Aspect-Oriented.

She also participates regularly in evaluation committees of Thesis (national and international), research projects (national and international) and national grants.

PhD Student Supervision

- Gustavo G. Pascual, Optimizing Mobile Applications by Exploiting Variability Models at Run-time, expected June 2017.
- Ayala-Viñas, Inmaculada; Model driven development of agents for ambient intelligence, 25/11/2013 (**BEST PhD Thesis Award**)
- Gámez-Gómez, Nadia Leonor; FAMIWARE: An Autonomic Middleware Family For Ambient Intelligence, 31/01/2012 (**BEST PhD Thesis Award**)
- Sánchez-Barreiro, Pablo; ALMADRABA - Model-Driven Development Of Aspect-Oriented Executable Uml Models; 2009 (**BEST PhD Thesis Award**)
- Amor-Pinilla, Mercedes; MALACA: Una Arquitectura Para El Desarrollo De Agentes Software Basados En Componentes y Aspectos; 2005
- Pinto-Alarcon, Monica; CAMP/DAOP: Modelo y Plataforma Basados En Componentes y Aspectos; 2004 (**BEST PhD Thesis Award**)