

CV Date	19/02/2023
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Part A. PERSONAL INFORMATION

First Name	Lola		
Family Name	Burgueño		
Sex	Female	Date of Birth	
ID number Social Security, Passport			
URL Web	http://lolaburgueno.github.io/		
Email Address	lolaburgueno@uma.es		
Open Researcher and Contributor ID (ORCID)	0000-0002-7779-8810		

A.1. Current position

Job Title	Profesor Contratado Doctor		
Starting date	2022		
Institution	Universidad de Málaga		
Department / Centre			
Country	Spain	Phone Number	
Keywords			

Part B. CV SUMMARY

Lola Burgueño obtained her PhD with honors in Computer Science from the University of Málaga in 2016. Her thesis, supervised by Prof. Vallecillo (University of Málaga) and Prof. Wimmer (Technological University of Vienna) addressed the field of Model-driven Engineering. Apart from her regular visits to Vienna, she spent 7 months in the United States as part of two research stays: 4 months at the University of Alabama under the supervision of Prof. Jeff Gray in 2014, and 3 months at Vanderbilt University with Prof. Gabor Karsai in 2016 as a postdoctoral researcher; and 6 months in Canada working together with Prof. Houari Sahraoui at the Université de Montréal in 2022. Between 2018 and 2020, she did a postdoc at UOC (Barcelona) and CEA LIST (Paris, France) fully funded by CEA LIST. From July 2020 until September 2023, she was a Juan de la Cierva Incorporación Fellow. Currently, she is an associate professor at the University of Málaga.

Her research interests focus mainly on the field of Model-Driven Software Engineering. She has made contributions to the application of artificial intelligence techniques to improve software development processes; uncertainty management during the software design phase; model-based software testing, and the design of algorithms and tools for improving the performance of model transformations.

Her work has been of interest to the community, with papers published in the main venues (e.g., TSE, IST, SoSyM, CAiSE, or ICSE), some of which have been awarded. She has been invited to deliver keynote/talks in international events such as the Lowcomote workshop and MSc courses at UUlM (Germany). She has received regular invitations to Bellairs and Dagstuhl workshops, and funded visits to research groups (e.g., BIG research group of TU Wien). She maintains an active and continuous participation in international events, performing roles not only in their organization, but also as a member of its program committees. She has been the PC Chair of two international conferences and of one national track. She is also in the Editorial Board of the SoSyM journal and has received the best reviewer award of the MODELS conference.

Some indicators of her research activity include:

- 20 journal papers, most of them indexed in JCR first or second quartiles (Q1, Q2) at the time of publication

- 10 conference papers published in top venues according to the GGS ranking: 5 in MODELS, 1 in RE, 1 in ICSOC, 1 in CAiSE, 1 in ASE and 1 in ICSE-NIER
- 44 papers in peer-reviewed conferences, 37 international and 8 national (Spanish).
- 1 book chapter
- According to DBLP, she has 117 different co-authors.
- Her Google Scholar h-index is 19

She has supervised 9 final year projects (TFM, TFG), some of them with research results that ended up being published. She has supervised two internships with a strong research focus, one of them funded by UOC internal competitive call.

Among the community service activities that she has carried out, it is worth mentioning:

- PC co-chair of ECMFA'21 and SLE'22
- Chair/Organizer of 19 events (e.g., students volunteer chair of MODELS'21, publicity chair of SLE'20, workshop chair of STAF'19, Educators Symposium co-chair of MODELS'18, PhD Symposium chair of ICSOC'17, etc.)
- She started the MDE Intelligence workshop series and has been leading it in its 2019-2022 editions
- Editor of the SoSyM Theme Issue "AI-enhanced Model-Driven Engineering" (2022)
- PC member in 33 peer-reviewed events, including top-ranked venues such as MODELS'21, ICSE'21 AE, SEAA'21, MODELS'20 ACM SRC, QUATIC'20, ECMFA'20, ICMT'19 and SLE'19
- Regular reviewer in indexed journals such as TSE, JSS, EMSE, SoSyM, and Computer Standard & Interfaces

She is member of the editorial board of the Software & System Modeling journal (JCR-indexed), Jan 2021-; and regular reviewer for the Spanish State Research Agency (Agencia Estatal de Investigación, AEI), 2021-. She has also acted as external reviewer for NSERC (major agency responsible for funding engineering research in Canada).

During her career, she has received the following awards / recognitions:

- Best PhD Thesis at the ISDM track at JISBD'22
- Distinguished reviewer award (MODELS 2021)
- 2 Best paper awards (MODELS 2015 and 2018)
- Recipient of the competitive Spanish post-doctoral fellowship JdC-I
- Accessit to the National Best PhD Thesis, awarded by the Spanish Society of Software Engineering (SISTEDES).
- Bronze medal at the ACM Student Research Competition at MODELS 2015
- Awarded with two competitive pre-doctoral grants (FPI and FPU) to undertake her PhD.
- Best Graduate Student Award (Premio Extraordinario Fin de Carrera), 2010.

She has taught courses in official bachelor's and master's degrees at the University of Málaga, Marbella International University Centre (an English-speaking private university) and the Open University of Catalonia, as well as courses based on agreements with private companies such as Accenture.

Part C. RELEVANT ACCOMPLISHMENTS

C.1. Most important publications in national or international peer-reviewed journals, books and conferences

AC: corresponding author. (n° x / n° y): position / total authors. If applicable, indicate the number of citations

- 1 Scientific paper.** Troya; Segura; Burgueño; Wimmer. 2023. Model Transformation Testing and Debugging: A Survey ACM Computing Surveys. 55(4)-4, pp.72:1-72:39.

- 2 **Scientific paper.** Burgueño; Muñoz; Clarisó; Cabot; Gerard; Vallecillo. 2022. Dealing with belief uncertainty in domain models ACM Transactions on Software Engineering and Methodology.
- 3 **Scientific paper.** Burgueño; Cabot; Li; Gérard. 2021. A Generic LSTM Neural Network Architecture to Infer Heterogeneous Model Transformations Software & Systems Modeling (SoSyM). Springer.
- 4 **Scientific paper.** Sánchez-Cuadrado; Burgueño; Wimmer; Vallecillo. 2021. Efficient execution of ATL model transformations using static analysis and parallelism IEEE Transactions on Software Engineering.
- 5 **Scientific paper.** Gunter Mussbacher; Benoit Combemale; Jörg Kienzle; et al; Martin Weysow. 2020. Opportunities for Intelligent Modeling Assistance Software & System Modeling. Springer. 19-5, pp.1045-1053.
- 6 **Scientific paper.** Burgueno; Cicozzi; Famelis; et al; MW. 2019. Contents for a Model-Based Software Engineering Body of Knowledge Software & System Modeling. Springer.
- 7 **Scientific paper.** MB; Burgueno; NM; Vallecillo. 2019. Incorporating measurement uncertainty into OCL/UML primitive datatypes Software & System Modeling. Springer.
- 8 **Scientific paper.** Moreno; Bertoa; Burgueño; Vallecillo. 2019. Managing Measurement and Occurrence Uncertainty in Complex Event Processing Systems IEEE Access. 7, pp.88026-88048.
- 9 **Scientific paper.** Burgueño; Mayerhofer; Wimmer; Vallecillo. 2019. Specifying quantities in software models Information and Software Technology. Information and Software Technology. 113, pp.82-97.
- 10 **Scientific paper.** Ameller; Franch; Gomez; et al; Berardinelli. 2019. Dealing with Non-Functional Requirements in Model-Driven Development: A Survey IEEE Transactions on Software Engineering.
- 11 **Scientific paper.** Hilken; Gogolla; Burgueno; Vallecillo. 2018. Testing Models and Model Transformations using Classifying Terms Software & System Modeling. 17-3, pp.885-912.
- 12 **Scientific paper.** Burgueño; Boubeta; Vallecillo. 2018. Formalizing Complex Event Processing Systems in Maude IEEE Access. 6, pp.23222-23241.
- 13 **Scientific paper.** Burgueño; Vallecillo; Gogolla. 2018. Teaching UML and OCL Models and their Validation to Software Engineering Students: An Experience Report Computer Science Education.
- 14 **Scientific paper.** Burgueño; Wimmer; Vallecillo. 2016. A Linda-based Platform for the Parallel Execution of Out-place Model Transformations Information and Software Technology. Information and Software Technology. 79, pp.17-35.
- 15 **Scientific paper.** Burgueño; Troya; Wimmer; Vallecillo. 2014. Static Fault Localization in Model Transformations IEEE Transactions on Software Engineering.
- 16 **Book chapter.** Vallecillo; Gogolla; Burgueno; Wimmer; Hamman. 2012. Formal Specification and Testing of Model Transformations Formal Methods for Model-Driven Engineering. 7320, pp.399-437.

C.2. Conferences (Most relevant)

- 1 Meriem Ben Chaaben; Lola Burgueño; Houari Sahraoui. Towards using Few-Shot Prompt Learning for Automating Model Completion. International Conference on Software Engineering (ICSE) - NIER track. Monash University & University of Melbourne. 2023. Australia.
- 2 Jörg Kienzle; Benoit Combemale; Gunter Mussbacher; Omar Alam; Francis Bordeleau, Lola Burgueño; Gregor Engels; Jessie Galasso, Jean-Marc Jézéquel; Betina Kemme; Sébastien Mosser; Houari Sahraoui; Maximilian Schiedermeier; Eugene Syriani. Global Decision Making Over Deep Variability in Feedback-Driven Software Development. Automated Software Engineering (ASE). Oakland University. 2022. USA.
- 3 Loli Burgueño; Robert Clarisó; Sébastien Gérard; Shuai Li; Jordi Cabot. An NLP-based architecture for the autocompletion of partial domain models. 33rd International Conference on Advanced Information Systems Engineering (CAiSE'21). University of Melbourne. 2021. Australia.

- 4 Jorge Perianez-Pascual; Roberto Rodriguez-Echeverría; Loli Burgueño; Jordi Cabot. Towards the Optical Character Recognition of DSLs. 13th ACM SIGPLAN International Conference on Software Language Engineering. University of Chicago. 2020. United States of America.
- 5 Loli Burgueño; Jordi Cabot; Robert Clarisó; Martin Gogolla. A Systematic Approach to Generate Diverse Instantiations for Conceptual Schemas. 38th International Conference on Conceptual Modeling. Federal University of Bahia. 2019. Brazil.
- 6 Loli Burgueño; Jordi Cabot; Sébastien Gérard. An LSTM-Based Neural Network Architecture for Model Transformations. 22th International Conference on Model Driven Engineering Languages and Systems (MODELS). Fortiss. 2019. Germany.
- 7 L. Burgueño; M. F. Bertoa; N. Moreno; A.Vallecillo. Expressing Confidence in Models and Model Transformation Elements. International Conference on Model Driven Engineering Languages and Systems. Copenhagen. 2018. Denmark. **Best Paper Award.**
- 8 Gala Barquero; Loli Burgueño; Javier Troya; Antonio Vallecillo. Extending Complex Event Processing to Graph-structured Information. International Conference on Model Driven Engineering Languages and Systems. ITU Copenhagen. 2018. Denmark.
- 9 Loli Burgueño; Martin Gogolla. Formally Modeling, Executing, and Testing Service-Oriented Systems with UML and OCL. 15th International Conference on Service-Oriented Computing 2017 (ICSOC 2017). Universidad de Málaga. 2017. Spain.
- 10 Martin Gogolla; Antonio Vallecillo; Loli Burgueño; Frank Hilken. Employing Classifying Terms for Testing Model Transformations. International Conference on Model Driven Engineering Languages and Systems, 2015. Ottawa, Canada. **Best Paper Award.**
- 11 M. Wimmer, L. Burgueño. Testing M2M/M2T/T2M Transformations. International Conference on Model Driven Engineering Languages and Systems. 2013. Miami.
- 12 David Ameller; Xavier Frank; Cristina Gómez; Antonio Vallecillo; Loli Burgueño; et al.. Handling Non-functional Requirements in Model-Driven Development: An Ongoing Industrial Survey. 23rd IEEE International Requirements Engineering Conference. University of Ottawa. 2015. Canada.

C.3. Research projects and contracts

- 1 **Project.** IPSCA: Including people in smart city applications. MICINN (PID2021-125527NB-I00). Antonio Vallecillo Moreno. (Universidad de Málaga). 01/09/2022-31/08/2026. Team member.
- 2 **Project.** Development of Software Assistants with AI Capabilities. Universitat Oberta de Catalunya. Burgueño. (Universitat Oberta de Catalunya). 01/09/2021-30/06/2022. 4.500 €.
- 3 **Project.** Open data para todos: Una infraestructura basada en APIs para la explotación de fuentes de datos online. MINECO (TIN2016-75944-R). Jordi Cabot Sagrera. (Universitat Oberta de Catalunya). 01/04/2017-30/06/2021. 117.906 €. Team member.
- 4 **Project.** COST Action IC1404: Multi-Paradigm Modelling for Cyber-Physical Systems (MPM4CPS). EU COST Action number IC1404. (Participants in: <https://www.cost.eu/actions/IC1404/#tabs|Name:parties>). 25/11/2014-24/11/2018. 76.000.000 €.
- 5 **Project.** POLYCIMS: Un marco dirigido por modelos para el diseño e integración de Sistemas de Gestión de Infraestructuras Críticas. MICINN (TIN2014-52034-R). Antonio Vallecillo Moreno. (Universidad de Málaga). 26/05/2015-26/05/2018. 179.300 €. Team member.
- 6 **Project.** WIMACS: Sistemas Inalámbricos de Gestión de Información Crítica. MICINN (TIN2011-23795). Manuel Díaz Rodríguez. (Universidad de Málaga). 01/01/2012-31/12/2014. 129.228 €. Becaria FPI
- 7 **Project.** MDD-MERTS : Diseño y Monitorización Dirigido por Modelos de Sistemas Empotrados y de Tiempo Real. CENTRO DE ACUSTICA APLICADA Y EVALUACION NO DESTRUCTIVA; MICINN (TIN2008-03107). Antonio Vallecillo Moreno. (Universidad de Málaga). 01/01/2009-30/06/2012. 268.620 €.
- 8 **Project.** Low-code development of smart software (PID2020-114615RB-I00). Ministerio de Ciencia e Innovación. Clarisó. (Universitat Oberta de Catalunya). From 01/09/2021. 56.870 €. Equipo de investigación
- 9 **Contract.** Model-IA. The beginnings of cognified MDE Platform CEA LIST (Ref. S32228). 01/10/2018-01/07/2020. 100.000 €.