

Part A. PERSONAL INFORMATION

CV date 24/02/2025

First name	Lola		
Family name	Burgueño Caballero		
Gender (*)	Female		
ID number	25346121-Y		
e-mail	lolaburgueno@uma.es	Web	https://lolaburgueno.github.io/
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-7779-8810		

A.1. Current position

Position	Associate Professor (Profesor Titular de Universidad)		
Initial date	05/05/2023		
Institution	Universidad de Málaga		
Department/Centre	ITIS Software		
Country	Spain	Phone number	+34 952 13 13 45
Keywords	Software Engineering, Model-based software engineering		

A.2. Previous positions (research activity interruptions)

Period	Position/Institution/Country/Cause of the interruption
05/05/2023-present	Associate Professor (TU), Universidad de Málaga, Spain
16/11/2022-04/04/2023	Associate Professor (PCD), Universidad de Málaga, Spain
01/09/2022-15/11/2022	Assistant Professor (AYD), Universidad de Málaga, Spain
01/10/2018-31/08/2022	Senior Researcher and Lecturer / UOC, CEA LIST / Spain, France
01/01/2017-30/09/2018	Postdoctoral Researcher / Universidad de Málaga / Spain
02/11/2017-27/11/2017	Lecturer / Marbella International University Centre / Spain
01/01/2013-31/12/2016	PhD Candidate / University of Málaga / Spain
16/11/2011-31/12/2012	Research Engineer / University of Málaga / Spain

A.3. Education

PhD, Graduate Degree	University/Country	Year
PhD in Software Engineering and Artificial Intelligence	University of Málaga / Spain	2016
MSc in Software Engineering and Artificial Intelligence	University of Málaga / Spain	2012
BSc in Computer Science	University of Málaga / Spain	2011
BSc in Technical Engineering in Computer Science	University of Málaga / Spain	2010

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 ISPR'23 conference, the Lowcomote workshop and the DiverSE Seminar among others, and MSc courses at UUI (Germany). She has received **regular invitations** to Bellairs, Shonan and Dagstuhl workshops, and funded visits to research groups (e.g., BIG research group of TU Wien, and IRISA in Rennes). 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 conference and a national (Spanish) one. 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:

- 25 journal papers, most of them indexed in JCR first or second quartiles (Q1, Q2) at the time of publication
- 11 conference papers published in top venues according to the iCORE ranking: 5 in MODELS, 2 in RE, 1 in ICSE, 1 in CAiSE, 1 in ASE, and 1 in ICSE-NIER
- 56 papers in peer-reviewed conferences, 46 international and 10 national (Spanish).
- 1 book chapter
- According to DBLP, she has 138 different co-authors.
- Her Google Scholar h-index is 23

She has/is supervising numerous final year projects (TFE), some of them with research results that ended up being published. She has supervised two internships with a strong research focus: María Galvez (Jun-Dec 2021) and David Delgado (Dec 2021-July 2022), funded by UOC internal competitive call.

The **community service** activities that she has carried out include:

- PC co-chair of ECMFA'21 and SLE'22; PC chair of JISBD'25
- Chair/Organizer of +20 events (e.g., ACM SRC of ICSE'2025, 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 ICSE'17, etc.)
- She started the MDE Intelligence workshop series and has been leading it in its 2019-2024 editions
- Editor of 2 SoSyM Theme Issues (2022, 2024) and 1 JSS Special Issue (2023).
- PC member in 52 peer-reviewed events, including top-ranked venues such as ASE'24, MODELS'21, ICSE'21 AE, SEAA'21, MODELS'20 ACM SRC, QUATIC'20, ECMFA'20, ICSE'19 and SLE'19
- Regular reviewer in indexed journals such as TSE, TOSEM, 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; the most relevant conference in the field of model-driven engineering)
- 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 BSc and MSc 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 MERITS

C.1. Journal Publications (10 most relevant)

- 1 L. Burgueño; P. Muñoz; R. Clarisó; J. Cabot; S. Gerard; Vallecillo. "Dealing with belief uncertainty in domain models". *ACM Transactions on Software Engineering and Methodology*. 32(2), pp. 31:1-31:34. 2022. DOI: 10.1145/3542947
- 2 J. Troya; S. Segura; L. Burgueño; M. Wimmer. "Model Transformation Testing and Debugging: A Survey". *ACM Computing Surveys*. 55(4)-4, pp.72:1-72:39. 2023. DOI: 10.1145/3523056
- 3 L. Burgueño, J. Cabot, S. Li, S. Gérard. 2021. "A Generic LSTM Neural Network to infer Heterogeneous Model Transformations". *Software & Systems Modeling*. Springer. 2021. DOI: 10.1007/s10270-021-00893-y
- 4 J. Sánchez-Cuadrado, L. Burgueño, M. Wimmer, A. Vallecillo. "Efficient execution of ATL model transformations using static analysis and parallelism". *IEEE Transactions on Software Engineering*. IEEE. 2021. DOI: 10.1109/TSE.2020.3011388
- 5 L. Burgueño, R. Clarisó, S. Gérard, S. Li, J. Cabot. "An NLP-based architecture for the autocompletion of partial domain models". *Proc. of CAiSE'21, LNCS12751*, pp. 91-106, Springer. Melbourne, Australia, June 2021. DOI: 10.1007/978-3-030-79382-1_6
- 6 L. Burgueño, T. Mayerhofer, M. Wimmer, A. Vallecillo. "Specifying quantities in software models Information and Software Technology". *Information and Software Technology*. 113, pp.82-97. Elsevier. 2019. DOI: 10.1016/j.infsof.2019.05.006
- 7 L. Burgueño, M. Bertoa, N. Moreno, A. Vallecillo. "Expressing Confidence in Models and Model Transformation Elements". *Proc. of MODELS'18*, pp. 57-66, ACM. Copenhagen, Denmark, October 2018. DOI: 10.1145/3239372.3239394 (**Best Paper Award**)
- 8 L. Burgueño, M. Wimmer, A. Vallecillo. "A Linda-based Platform for the Parallel Execution of Out-place Model Transformations" *Information and Software Technology* 79, pp.17-35. Elsevier. 2016. DOI: 10.1016/j.infsof.2016.06.001
- 9 L. Burgueño, J. Troya, M. Wimmer, A. Vallecillo. "Static Fault Localization in Model Transformations" *IEEE Transactions on Software Engineering*, 41(5) pp. 490-506. IEEE. 2015. DOI: 10.1109/TSE.2014.2375201
- 10 **Book chapter**. A. Vallecillo, M. Gogolla, L. Burgueño, M. Wimmer, L. Hamman. "Formal Testing of Model Transformations Formal Methods for Model-Driven Engineering". *LNCS 7320*, pp.399-437, Springer. 2012. ISBN: ISBN978-3-642-30981-6

C.2. Organization of R&D activities (10 most relevant, sorted by date)

- 1 PC chair of the Spanish conference on Software Engineering and Databases (JISBD). September 9-11, 2025. Córdoba, Spain.
- 2 ACM Student Research Competition co-chair of the 47th edition of the International Conference on Software Engineering (ICSE'25). April 27-May 3, 2025. Ottawa, Canada.
- 3 PC co-chair of the 15th ACM SIGPLAN International Conf. on Software Language Engineering (SLE'22). December 5-10, 2022. Auckland, New Zealand.
Co-chair: Walter Cazzola (University of Milano, Italy).
- 4 PC co-chair of the 17th European conference on Modeling Foundations and Applications (ECMFA'21). June 21-25, 2021. Bergen, Norway / Virtual.
Co-chair: Martin Gogolla (University of Bremen, Germany).

- 5 Students volunteer co-chair of the 24th edition of the International Conference on Model Driven Engineering Languages and Systems (MODELS'21). October 10-15, 2021. Fukuoka, Japan / Virtual. Co-chair: Lei Ma (Kyushu University, Japan).
- 6 Workshop co-chair of the Software Technologies: Applications and Foundations federation of conferences (STAF'20). June 22-26, 2020. Bergen, Norway. Co-chair: Lars Michael Kristensen (Western Norway University of Applied Sciences, Norway).
- 7 Co-founder and leader of the MDE Intelligence workshop series in its 2019, 2020 and 2021 editions, co-located with MODELS (Copenhagen, Denmark; Montréal, Canada / virtual; Fukuoka, Japan / virtual).
- 8 First Junior Researcher Community Event chair, co-located with the Software Technologies: Applications and Foundations federation of conferences (STAF'19). July 15-19, 2019. Eindhoven, The Netherlands.
- 9 Educators Symposium co-chair of the 21st edition of the International Conference on Model Driven Engineering Languages and Systems (MODELS'18). October 14-19, 2018. Copenhagen, Denmark. Co-chair: Martin Gogolla (University of Bremen, Germany).
- 10 PhD Symposium co-chair of the 15th International Conference on Service-Oriented Computing (ICSOC'17). November 13-16, 2017. Malaga, Spain. (International conference). Co-chair: Naouel Moha (Université du Québec à Montréal, Canada).

C.3. Research projects (Most relevant)

- 1 PRETEST: Generación y ejecución automática de pruebas software en entornos de desarrollo sin intervención humana () Universidad de Malaga. 1/1/2024 – 31/12/2025. 4.000 € PI: **L. Burgueño**.
- 2 IPSCA: Including people in smart city applications (PID2021-125527NB-I00) MICINN. 1/9/2022 - 31/8/2026. 167.948,00 € PI: A. Vallecillo, C. Canal (University of Málaga). Research team.
- 3 LOCOS: Low-code development of smart software (PID2020-114615RB-I00). MICINN. 01/09/2021-31/08/2024. 56.870 €. PI: R. Clarisó and J. Cabot (Universitat Oberta de Catalunya). Research Team, leader of two work packages.
- 4 Development of Software Assistants with AI Capabilities. Universitat Oberta de Catalunya. 01/09/2021-30/06/2022. 4.500 €. PI: **L. Burgueño**.
- 5 ODA: Open data para todos: Una infraestructura basada en APIs para la explotación de fuentes de datos online. MINECO (TIN2016-75944-R). 01/04/2017-30/06/2021. 117.906€. PI: J. Cabot (Universitat Oberta de Catalunya). Research Team.
- 6 MPM4CPS: Multi-Paradigm Modelling for Cyber-Physical Systems. EU COST Action number IC1404. 25/11/2014- 24/11/2018. 76.000.000 €. PI: Hans Vangheluwe (University of Antwerp & McGill University). Research Team.
- 7 POLYCIMS: Un Marco dirigido por modelos para el diseño e integración de Sistemas Inalámbricos de Gestión de Infraestructuras Críticas (TIN2014-52034-R). 26/05/2015-26/05/2018. 179.300 €. PI: Antonio Vallecillo (University of Málaga). Research Team.
- 8 WIMACS: Sistemas Inalámbricos de Gestión de Información Crítica. MICINN (TIN2011-23795). 01/01/2012- 31/12/2014. 129.228 €. PI: Manuel Díaz (University of Málaga). PhD Candidate (FPI).
- 9 MDD-MERTS: Diseño y Monitorización Dirigido por Modelos de Sistemas Empotrados y de Tiempo Real, MICINN (TIN2008-03107). 01/01/2009-30/06/2012. 268.620 €. PI: A. Vallecillo (University of Málaga). Research Team.

C.4. Research stays in renowned institutions

- 2014 University of Alabama, USA. Supervised by Prof. Jeff Gray. 4 months
2016 Vanderbilt University, USA. Supervised by Prof. Gabor Karsai. 3 months
2022 Université de Montréal, Canada. Supervised by Prof. Houari Sahraoui. 6 months

C.5. Technology/Knowledge transfer

- 1 **Contract**. Model-IA: The beginnings of cognified MDE Platform. CEA LIST (Ref. S32228). 01/10/2018-01/07/2020. 100.000 €.