c v n CURRÍCULUM VÍTAE NORMALIZADO

Javier Cámara Moreno
Generated from: Editor CVN de FECYT
Date of document: 11/12/2025
v 1.4.3
c6daa911b6039245468b529199473f4f

GOBIERNO
DE ESPAÑA

MINISTERIO
DE CIENCIA, INNOVACIÓN
Y UNIVERSIDADES

FECYT
INNOVACIÓN

Summary of CV

This section describes briefly a summary of your career in science, academic and research; the main scientific and technological achievements and goals in your line of research in the medium -and long- term. It also includes other important aspects or peculiarities.

Javier Cámara has been a Tenured Associate Professor (Profesor Titular de Universidad) at the University of Málaga since March 2022, and holds an accreditation to Full Professor (Catedrático de Universidad) by the ANECA (National Agency for Quality Assessment and Accreditation of Spain) since May 2024. His research lines are at the intersection of software engineering, formal methods and Artificial Intelligence, with a focus in the areas of SE for autonomous and self-adaptive systems and software architecture.

Member of the ITIS Software Engineering Institute at the University of Málaga and Honorary Visiting Fellow at the Deptartment of Computer Science at the University of York, where he was a lecturer during 2018-2021. Affiliated researcher at the Architecture-Based Languages and Environments (ABLE) group at Carnegie Mellon University, where he was a member of the faculty of the School of Computer Science during the years 2015-2018, after being a postdoctoral researcher in the same institution during 2013-2015.

He has participated as co-PI of 6 projects funded by various entities that include Next Generation EU (through the Spanish Government – Agencia Estatal de Investigación), the defence science tech lab (Dstl, part of the UK Ministry of Defence), the UK Atomic Energy Authority, and the Assuring Autonomy International Programme, many of them in the area of SE for robotic and adaptive systems (total funding approx. 1M EUR). In the US, he has been an investigator in 6 projects funded by DARPA, the Office of Naval Research (US Navy), NSA, NASA, and the US Department of Defense. These projects were in the areas of software engineering for self-adaptive systems applied to domains such as robotics and cyber-security. Earlier, he was a postdoctoral researcher at the University of Coimbra (2011-2013) and INRIA (2010), where he participated in projects in the areas of self-adaptive and cyber-physical systems.

Author of more than 100 publications indexed by Scopus. 25+ of them are JCR articles (20 Q1/Q2), 3 are CORE A*, and 20+ are CORE A conferences. Cited 2159/4078 times (Scopus/G.Scholar) and with an h-index of 25/38 as of December 5th, 2025. Successfully advised 3 Ph.D. theses (other two in progress). Recipient of the Best Tool Demo Award at the 14th European Conference on Software Architecture (ECSA 2020), the Best Paper Award at the 11th European Conference on Software Architecture (ECSA 2017), and an ACM SIGSOFT Distinguished Paper Award at the International Conference on the Quality of Software Architectures (QoSA 2014).
Guest Editor of special issues at IEEE Software, Science of Computer Programming and ACM Transactions on Autonomous and Adaptive Systems. Regular reviewer for journals

such as IEEE Transactions on Software Engineering, Communications of the ACM, IEEE Software, IEEE Transactions on Dependable and Secure Computing, ACM Transactions on Software Engineering Methodology, ACM Transactions on Autonomous and Adaptive Systems, Journal of Systems and Software, Science of Computer Programming, and Information and Software Technology, among others.

Member of more than 50 PC in international events, also playing key roles such as PC Chair, Track Chair, Publicity Chair, Workshops Chair, etc. These events include, among others, FACS (International Conference on Formal Aspects of Component Software – PC Chair 2023), SEAMS (International Conference on Software Engineering for Adaptive and Self-Managing Systems - PC Chair 2022, Artifact track Chair 2017), ECSA (European Conference on Software Architecture - Industry Track Chair 2019, Gender Diversity in Software Architecture track chair 2020), and ICSA (International Conference on Software Architecture - New ideas and emerging results track chair 2021, workshops and tutorials chair 2023). Organizer of two National Institute of Informatics Japan (NII) Shonan seminars in 2020 and 2026. Member of the Steering Committees of FACS (since 2023) and SEAMS (since 2022). Steering Committee Chair of SEAMS since 2024. Member representative at the European Research Council on Informatics and Mathematics (ERCIM) since 2023.

General quality indicators of scientific research

This section describes briefly the main quality indicators of scientific production (periods of research activity, experience in supervising doctoral theses, total citations, articles in journals of the first quartile, H index...). It also includes other important aspects or peculiarities.

* Author of 125+ publications indexed by Scopus, 100+ WoS
* 26 JCR articles (9 Q1, 11 Q2, 5 Q3, 1 Q4)
* 3 CORE A* conferences, 23 CORE A, 9 CORE B, and 4 CORE C
* Cited 4078/2159/1210 times (G.Scholar/Scopus/WoS) with an h-index of 38/25/20 as of December 5th, 2025
* Successfully advised 3 Ph.D. theses (other two in progress)
* Investigator in 19 US/UK/European projects (funded by e.g., DARPA, NSA, ONR, NASA, UKAEA, Dstl, Next Generation EU).
* Principal (co-)Investigator in 4 UK and 2 Spanish projects.
* Recipient of the Best Tool Demo Award at the 14th European Conference on Software Architecture (ECSA 2020)
* Recipient of the Best Paper Award at the 11th European Conference on Software Architecture (ECSA 2017)
* Recipient of an ACM SIGSOFT Distinguished Paper Award at the International ACM SIGSOFT Conference on the Quality of Software Architectures (QoSA 2014)
* Steering Committee Chair of the International Conference on Software Engineering for Adaptive and Self-managing Systems (SEAMS, CORE A), since 2024

* Member of more than 50 PC in international events, including PC Chair of 1 CORE A conference (SEAMS 2022)
* Member of the organizing team of multiple international conferences with roles as track chair in 4 CORE A conferences (ECSA 2019, ECSA 2020, ICSA 2021, ICSA 2023)
* Organizer of two Shonan seminar at the National Institute of Informatics of Japan (NII) (2020, 2026)
* Editor of 4 special issues at JCR-Ranked Journals (IEEE Software, ACM Transactions on Autonomous and Adaptive Systems, and 2xScience of Computer Programming)

Javier Cámara Moreno

Surname(s):	**Cámara Moreno**
Name:	**Javier**
DNI:	**74655852Z**
ORCID:	**0000-0001-6717-4775**
ResearcherID:	**ABF-1534-2021**
Date of birth:	**24/11/1977**
Gender:	**Male**
Nationality:	**Spain**
Country of birth:	**Spain**
Aut. region/reg. of birth:	**Andalusia**
Contact province:	**Málaga**
City of birth:	**Granada**
Contact address:	**Lenguajes y Ciencias de la Computación. ETSI Informática**
Rest of contact address:	**Bulevar Louis Pasteur, 35**
Postcode:	**29071**
Contact country:	**Spain**
Contact aut. region/reg.:	**Andalusia**
Contact city:	**Málaga**
Email:	**jcamara@uma.es**
Mobile phone:	**(34) 637380782**
Personal web page:	**https://javier-camara.github.io/**

Current professional situation

1   **Employing entity:** Universidad de Málaga
Department: Lenguajes y Ciencias de la Computación, ETSI Informática
Professional category: Profesor Titular de Universidad
Start date: 03/2022
Type of contract: Permanent employment contract   **Dedication regime:** Full time
Primary (UNESCO code): 120300 - Computer Sciences
Identify key words: Software; Software architectures

2   **Employing entity:** University of York   **Type of entity:** University
Department: Faculty of Sciences
Professional category: Honorary Visiting Fellow
Start date: 09/2021
Type of contract: Honorary appointment

Previous positions and activities

	Employing entity	Professional category	Start date
1	Universidad de Málaga	Profesor Contratado Doctor	09/2021
2	University of York	Lecturer	09/2018

	Employing entity	Professional category	Start date
3	Carnegie Mellon University	Senior Systems Scientist	07/2018
4	Carnegie Mellon University	Systems Scientist	07/2015
5	Carnegie Mellon University	Postdoctoral Researcher	04/2013
6	Universidade de Coimbra	Postdoctoral Researcher	01/2011
7	INRIA	Postdoctoral Researcher	01/2010
8	Universidad de Málaga	Becario proyectos de excelencia Junta de Andalucía	04/2006
9	FUNDACION CENTRO ANDALUZ DE INNOVACION Y TECNOLOGIAS DE LA INFORMACION Y COMUNICACION	Ingeniero Software	04/2004

1   **Employing entity:** Universidad de Málaga   **Type of entity:** University
Professional category: Profesor Contratado Doctor
Start-End date: 09/2021 - 28/02/2022

2   **Employing entity:** University of York   **Type of entity:** University
Department: Department of Computer Science, Faculty of Sciences
City employing entity: York, United Kingdom
Professional category: Lecturer
Start-End date: 09/2018 - 08/2021
Type of contract: Permanent employment contract
Dedication regime: Full time

3   **Employing entity:** Carnegie Mellon University   **Type of entity:** University
Department: Institute for Software Research, School of Computer Science
City employing entity: Pittsburgh, United States of America
Professional category: Senior Systems Scientist   **Leadership and management (Y/N):** No
Start-End date: 07/2018 - 08/2018
Dedication regime: Full time

4   **Employing entity:** Carnegie Mellon University   **Type of entity:** University
Department: Institute for Software Research, School of Computer Science
City employing entity: Pittsburgh, United States of America
Professional category: Systems Scientist
Start-End date: 07/2015 - 06/2018
Dedication regime: Full time

5   **Employing entity:** Carnegie Mellon University   **Type of entity:** University
Department: Institute for Software Research, School of Computer Science
City employing entity: Pittsburgh, United States of America
Professional category: Postdoctoral Researcher
Start-End date: 04/2013 - 06/2015
Type of contract: Temporary employment contract
Dedication regime: Full time

6   **Employing entity:** Universidade de Coimbra   **Type of entity:** University
Department: Centre for Informatics and Systems (CISUC)
City employing entity: Coimbra, Portugal
Professional category: Postdoctoral Researcher

Start-End date: 01/2011 - 03/2013
Type of contract: Temporary employment contract
Dedication regime: Full time

7 **Employing entity:** INRIA   **Type of entity:** Public Research Body
Department: INRIA Rhône-Alpes
City employing entity: Grenoble, France
Professional category: Postdoctoral Researcher
Start-End date: 01/2010 - 12/2010
Type of contract: Temporary employment contract
Dedication regime: Full time

8 **Employing entity:** Universidad de Málaga   **Type of entity:** University
Department: Lenguajes y Ciencias de la Computación, ETS de Ingeniería Informática
Professional category: Becario proyectos de excelencia Junta de Andalucía
Start-End date: 04/2006 - 12/2009
Type of contract: Grant-assisted student (pre or post-doctoral, others)
Dedication regime: Full time

9 **Employing entity:** FUNDACION CENTRO ANDALUZ DE INNOVACION Y TECNOLOGIAS DE LA INFORMACION Y COMUNICACION
Professional category: Ingeniero Software
Start-End date: 04/2004 - 03/2006
Type of contract: Permanent employment contract
Dedication regime: Full time

Education

University education

1st and 2nd cycle studies and pre-Bologna degrees

University degree: Higher degree
Name of qualification: Ingeniero en Informática
Degree awarding entity: Universidad de Granada   **Type of entity:** University
Date of qualification: 16/10/2003

Doctorates

Doctorate programme: Ingeniería del Software e Inteligencia Artificial
Degree awarding entity: Universidad de Málaga   **Type of entity:** University
Date of degree: 18/11/2009
DEA awarding entity: Universidad de Málaga
Date DEA was awarded: 23/05/2007
European doctorate: Yes   **Date of certificate:** 24/11/2009
Thesis title: Run-time Behavioural Adaptation of Components and Services
Thesis director: Carlos Canal Velasco
Thesis co-director: Gwen Salaun
Obtained qualification: Sobresaliente Cum Laude
Recognition of quality: Yes

Other postgraduate university studies

Type of education: Postgraduate
Postgraduate qualification: Postgraduate Certificate in Academic Practice (PGCAP)
City degree awarding entity: York, United Kingdom
Degree awarding entity: University of York   **Type of entity:** University
Date of qualification: 27/05/2021

Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
English	C1	C1	C1	C1	C1

Teaching experience

General teaching experience

1   **Name of the course:** Introducción a la Ingeniería del Software
     University degree: Graduado en Ingeniería Informática
     Start date: 01/02/2025   **End date:** 01/06/2025
     Entity: Universidad de Málaga   **Type of entity:** University

2   **Name of the course:** Desarrollo de Aplicaciones en la Nube
     University degree: Master en Ingeniería Informática
     Start date: 15/09/2024   **End date:** 15/01/2025
     Entity: Universidad de Málaga   **Type of entity:** University

3   **Name of the course:** Introducción a la Ingeniería del Software
     University degree: Graduado en Ingeniería Informática
     Start date: 01/02/2024   **End date:** 01/06/2024
     Entity: Universidad de Málaga   **Type of entity:** University

4   **Name of the course:** Introduction to Software Engineering
     University degree: Graduado en Ingeniería del Software
     Start date: 01/02/2024   **End date:** 01/06/2023
     Entity: Universidad de Málaga   **Type of entity:** University

5   **Name of the course:** Introducción a la Ingeniería del Software
     University degree: Graduado en Ingeniería del Software
     Start date: 01/02/2023   **End date:** 01/06/2023
     Entity: Universidad de Málaga   **Type of entity:** University

6   **Name of the course:** Desarrollo de Aplicaciones en la Nube
     University degree: Master en Ingeniería Informática
     Start date: 15/09/2022   **End date:** 15/01/2023
     Entity: Universidad de Málaga   **Type of entity:** University

7   **Name of the course:** Ingeniería Web
     University degree: Graduado en Ingeniería de la Salud
     Start date: 15/09/2022   **End date:** 15/01/2023
     Entity: Universidad de Málaga   **Type of entity:** University

8   **Name of the course:** Porgramación Orientada a Objetos
     University degree: Graduado en Ingeniería Informática
     Start date: 01/02/2022   **End date:** 01/06/2022
     Entity: Universidad de Málaga   **Type of entity:** University

9   **Name of the course:** Redes y Sistemas Distribuidos
     University degree: Graduado en Ingeniería de Computadores
     Start date: 01/02/2022   **End date:** 01/06/2022

Entity: Universidad de Málaga   **Type of entity:** University

10   **Name of the course:** Informática
University degree: Graduado en Biología
Start date: 15/09/2021   **End date:** 15/01/2022
Entity: Universidad de Málaga   **Type of entity:** University

11   **Name of the course:** Modelado y Diseño de Software
University degree: Graduado en Ingeniería del Software
Start date: 15/09/2021   **End date:** 15/01/2022
Entity: Universidad de Málaga   **Type of entity:** University

12   **Name of the course:** Sistemas Informáticos Aplicados al Turismo
University degree: Graduado en Turismo
Start date: 15/09/2021   **End date:** 15/01/2022
Entity: Universidad de Málaga   **Type of entity:** University

13   **Name of the course:** Engineering 1
University degree: BSc Computer Science
Start date: 03/10/2020   **End date:** 15/05/2021
Entity: University of York   **Type of entity:** University
Faculty, institute or centre: Department of Computer Science, Faculty of Sciences

14   **Name of the course:** Legal Practice, Technology and Computer Science
University degree: BSc Law y BSc Computer Science
Start date: 03/10/2020   **End date:** 15/05/2021
Entity: University of York   **Type of entity:** University
Faculty, institute or centre: Department of Computer Science, Faculty of Sciences

15   **Name of the course:** Software Engineering Project
University degree: BSc Computer Science
Start date: 03/10/2019   **End date:** 15/05/2020
Entity: University of York   **Type of entity:** University
Faculty, institute or centre: Department of Computer Science, Faculty of Sciences

16   **Name of the course:** Software Engineering Project
University degree: BSc Computer Science
Start date: 03/10/2018   **End date:** 15/05/2019
Entity: University of York   **Type of entity:** University
Faculty, institute or centre: Department of Computer Science, Faculty of Sciences

17   **Name of the course:** Models of Software Systems
University degree: Masters in Software Engineering
Start date: 20/08/2017   **End date:** 15/12/2017
Entity: Carnegie Mellon University   **Type of entity:** University
Faculty, institute or centre: School of Computer Science

18   **Name of the course:** Models of Software Systems
University degree: Masters in Software Engineering
Start date: 20/08/2016   **End date:** 15/12/2016
Entity: Carnegie Mellon University   **Type of entity:** University

Faculty, institute or centre: School of Computer Science

19 **Name of the course:** Models of Software Systems
University degree: Masters in Software Engineering
Start date: 20/08/2015 **End date:** 15/12/2015
Entity: Carnegie Mellon University **Type of entity:** University
Faculty, institute or centre: School of Computer Science

20 **Name of the course:** Models of Software Systems
University degree: Masters in Software Engineering
Start date: 20/08/2014 **End date:** 15/12/2014
Entity: Carnegie Mellon University **Type of entity:** University
Faculty, institute or centre: School of Computer Science

21 **Name of the course:** Models of Software Systems
University degree: Masters in Software Engineering
Start date: 20/08/2013 **End date:** 15/12/2013
Entity: Carnegie Mellon University **Type of entity:** University
Faculty, institute or centre: School of Computer Science

22 **Name of the course:** Elementos de Programación
University degree: Ingeniero Técnico en Informática de Sistemas
Start date: 01/10/2009 **End date:** 01/02/2010
Entity: Universidad de Málaga **Type of entity:** University
Faculty, institute or centre: ETS de Ingeniería Informática

23 **Name of the course:** Metodlogía de la Programación
University degree: Ingeniero Técnico en Informática de Gestión
Start date: 01/10/2009 **End date:** 01/02/2010
Entity: Universidad de Málaga **Type of entity:** University
Faculty, institute or centre: ETS de Ingeniería Informática

24 **Name of the course:** Elementos de Programación
University degree: Ingeniero Técnico en Informática de Sistemas
Start date: 01/10/2008 **End date:** 01/02/2009
Entity: Universidad de Málaga **Type of entity:** University
Faculty, institute or centre: ETS de Ingeniería Informática

25 **Name of the course:** Ingeniería del Software. Diseño
University degree: Ingeniero en Informática
Start date: 01/02/2007 **End date:** 30/06/2008
Entity: Universidad de Málaga **Type of entity:** University
Faculty, institute or centre: ETS de Ingeniería Informática

Experience supervising doctoral thesis and/or final year projects

1 **Project title:** A Full-Plant, Physics-Aware Approach to the Planning and Control of Multi-Robot Nuclear Fusion Maintenance Systems
Type of project: Doctoral thesis
Entity: University of York
Student: Brendan Devlin-Hill
Date of reading: 25/09/2025

2 **Project title:** Modelado y análisis de un sistema autónomo para supervisión de incendios forestales
Type of project: Bachelor's Thesis
Entity: Universidad de Málaga   **Type of entity:** University
Student: Andrés Pérez García
Date of reading: 18/12/2024

3 **Project title:** Sistema de Evaluación de Coste para Aplicaciones Híbridas (Cuánticas-Clásicas)
Type of project: Master's Thesis
Entity: Universidad de Málaga   **Type of entity:** University
Student: Álvaro Aparicio Morales
Date of reading: 25/09/2024

4 **Project title:** Scheduling of Missions with Constrained Tasks for Heterogeneous Multi-Robot Systems
Type of project: Doctoral thesis
Entity: University of York   **Type of entity:** University
Student: Gricel Vazquez Flores
Date of reading: 17/07/2024

5 **Project title:** Desarrollo de un panel de control online para gemelos digitales de vehículos eléctricos
Type of project: Bachelor's Thesis
Entity: Universidad de Málaga   **Type of entity:** University
Student: Roberto Navarro García
Date of reading: 10/07/2024

6 **Project title:** Desarrollo de sistema inteligente para la planificación de carga de vehículos eléctricos bajo incertidumbre
Type of project: Master's Thesis
Entity: Universidad Internacional de Valencia   **Type of entity:** University
Student: Raquel Sánchez Salas
Date of reading: 26/10/2023

7 **Project title:** Monitorización de incendios con UAV mediante técnicas de Deep Reinforcement Learning
Type of project: Master's Thesis
Entity: Universidad de Málaga   **Type of entity:** University
Student: Enrique Vilchez Campillejo
Date of reading: 26/09/2023

8 **Project title:** Análisis de redes sociales usando procesamiento de lenguaje natural para la detección de eventos en ciudades inteligentes
Type of project: Bachelor's Thesis

Entity: Universidad de Málaga **Type of entity:** University
Student: Paula Cosano
Date of reading: 21/09/2023

9 **Project title:** Desarrollo de una aplicación móvil para la selección interactiva de destinos turísticos adaptados a personas con diversidad funcional
Type of project: Bachelor's Thesis
Entity: Universidad de Málaga **Type of entity:** University
Student: Francisco Pozo Navarro
Date of reading: 19/06/2023

10 **Project title:** Decentralised Control for Distributed Self-adaptive System with Strict Quality- of-Service Requirements,
Type of project: Doctoral thesis
Entity: University of York **Type of entity:** University
Student: Saud Yonbawi
Date of reading: 15/06/2021

11 **Project title:** Interactive Trade-off Explorer for Software Architectures
Type of project: Bachelor's Thesis
Entity: University of York **Type of entity:** University
Student: Marcel Miró Puges
Date of reading: 18/05/2021

12 **Project title:** Offline Synthesis of Plan Repertoires for Adaptive Mobile Robotics
Type of project: Bachelor's Thesis
Entity: University of York **Type of entity:** University
Student: Emily Hall
Date of reading: 18/05/2021

13 **Project title:** Solving the Multi-Agent Path Finding (MAPF) Problem with SAT
Type of project: Bachelor's Thesis
Entity: University of York **Type of entity:** University
Student: Golnar Kaviani
Date of reading: 17/05/2021

14 **Project title:** Visualisation of Software Architectures for Trade-off Analysis
Type of project: Bachelor's Thesis
Entity: University of York **Type of entity:** University
Student: Michael Elliot
Date of reading: 17/05/2021

15 **Project title:** Interactive Trade-off Explorer for Software Architectures
Type of project: Master's Thesis
Entity: University of York **Type of entity:** University
Student: Yingyu Yang
Date of reading: 17/05/2021

16 **Project title:** Efficient Optimisation of Quantitative Guarantees Under Uncertainty in Mobile Robotics Software
Type of project: Bachelor's Thesis
Entity: University of York **Type of entity:** University

Student: Harry Clements
Date of reading: 14/05/2020

17 **Project title:** Graphical Specification of Probabilistic Software Models
Type of project: Bachelor's Thesis
Entity: University of York   **Type of entity:** University
Student: Peter Jupp
Date of reading: 16/05/2019

18 **Project title:** Trade-off Explorer for Software Architectures
Type of project: Bachelor's Thesis
Entity: University of York   **Type of entity:** University
Student: Jason Mashinchi
Date of reading: 16/05/2019

19 **Project title:** Managing Uncertainty in Self-Adaptive Systems
Type of project: Master's Thesis
Entity: Carnegie Mellon University   **Type of entity:** University
Student: Wenxin Peng
Date of reading: 02/05/2016

20 **Project title:** Modeling Uncertainty in Self-Adaptive Systems
Type of project: Master's Thesis
Entity: Carnegie Mellon University   **Type of entity:** University
Student: Won Gu Kang
Date of reading: 02/05/2016

21 **Project title:** Run-time Stochastic Analysis for Self-Adaptation
Type of project: Master's Thesis
Entity: Carnegie Mellon University   **Type of entity:** University
Student: Denis Anisimov
Date of reading: 13/05/2014

22 **Project title:** A Case Study on Architecture-based Resilience Evaluation for Self-Adaptive Systems
Type of project: Master's Thesis
Entity: Universidade de Coimbra   **Type of entity:** University
Student: Pedro Correia
Date of reading: 01/06/2013

23 **Project title:** Framework for run-time behavioural adaptation in ubiquitous computing environments
Type of project: Master's Thesis
Entity: Universidad de Málaga   **Type of entity:** University
Student: Nikolay Vasilev
Date of reading: 01/06/2010

Courses and seminars given

1 **Type of event:** Mini curso de especialización en programa de doctorado
Name of the event: Lecture Series on Probabilistic Modeling and Formal Verification
Organising entity: Gran Sasso Science Institute   **Type of entity:** University Centres and Structures and Associated Bodies

Hours of teaching: 6
Teaching date: 21/05/2023

2 **Type of event:** Mini curso de especialización en programa de doctorado
Name of the event: Online lecture series on Probabilistic Model Checking
Organising entity: Gran Sasso Science Institute   **Type of entity:** University Centres and Structures and Associated Bodies

Hours of teaching: 6
Teaching date: 08/06/2020

3 **Type of event:** Seminar
Name of the event: Model Integration and Decision Making for Software Adaptation in Mobile Robotics
Organising entity: Gran Sasso Science Institute   **Type of entity:** University Centres and Structures and Associated Bodies

Hours of teaching: 2
Teaching date: 04/03/2019

4 **Type of event:** Curso de especialización en Programa de Doctorado en Ingeniería del Software e Inteligencia Artificial
Name of the event: I Curso de Posgrado Verificación y Evaluación de Sistemas Adaptativos
Organising entity: Universidad de Málaga   **Type of entity:** University
Hours of teaching: 16
Teaching date: 01/03/2012

Scientific and technological experience

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities

1   **Name of the project:** IPSCA: Including people in smart city applications
Entity where project took place: Universidad de Málaga   **Type of entity:** University
Nº of researchers: 8
Code according to the funding entity: PID2021-125527NB-I00
Start-End date: 01/09/2022 - 01/09/2026
Total amount: 249.240 €

2   **Name of the project:** ICIMUC: Plataforma Inteligente de Gestión de Ciberseguridad Multicloud en el Ámbito de la Industria 4.0
Type of project: Industrial research
Entity where project took place: Universidad de Málaga   **Type of entity:** University
Name principal investigator (PI, Co-PI....): Javier Cámara Moreno
Nº of researchers: 5
Code according to the funding entity: AEI-010500-2023-69
Start-End date: 03/04/2023 - 01/05/2024
Total amount: 454.988 €
Dedication regime: Part time

3   **Name of the project:** ALMI: Robotic Assistive Care for Ambient-assisted Living
Geographical area: Non EU International
Entity where project took place: University of York
City of entity: York, North Yorkshire, United Kingdom
Name principal investigator (PI, Co-PI....): Radu Calinescu; Javier Cámara Moreno
Nº of researchers: 4
Funding entity or bodies:
Lloyd's Register Foundation   **Type of entity:** Foundation

Start-End date: 01/06/2021 - 01/12/2022

4   **Name of the project:** Digital Avatars: A Framework for Collaborative Social Computing Applications
Entity where project took place: Universidad de Málaga   **Type of entity:** University
Nº of researchers: 8
Code according to the funding entity: PGC2018-094905-B-I00
Start-End date: 01/09/2021 - 30/09/2022
Total amount: 190.000 €

5 **Name of the project:** RASPBERRY SI: Resource Adaptive Software Purpose-Built for Extraordinary Robotic Research Yields
Geographical area: Non EU International
Entity where project took place: University of South **Type of entity:** University
Carolina
City of entity: Columbia, United States of America
Name principal investigator (PI, Co-PI....): Pooyan Jamshidi
Funding entity or bodies:
National Aeronautics and Space Administration (NASA)
City funding entity: United States of America

Start-End date: 01/09/2020 - 31/08/2022

6 **Name of the project:** AMCA: Assured Mission-Critical Applications for Teams of Unmanned Vehicles
Entity where project took place: University of York
City of entity: York, North Yorkshire, United Kingdom
Name principal investigator (PI, Co-PI....): Radu Calinescu; Javier Cámara Moreno; Simos Gerasimou
Nº of researchers: 4
Funding entity or bodies:
Defence Science Technology Laboratory (Dstl)   **Type of entity:** State agency
City funding entity: United Kingdom

Start-End date: 01/03/2019 - 30/11/2019

7 **Name of the project:** Model-Based Adaptation for Mobile Robotics
Entity where project took place: Carnegie Mellon   **Type of entity:** University
University
City of entity: Pittsburgh, United States of America
Name principal investigator (PI, Co-PI....): Jonathan Aldrich; David Garlan
Funding entity or bodies:
Defense Advanced Research Projects Agency (DARPA)
City funding entity: United States of America

Start-End date: 01/11/2015 - 01/09/2019

8 **Name of the project:** Lablet: Scalability and Usability
Entity where project took place: Carnegie Mellon   **Type of entity:** University
University
City of entity: Pittsburgh, United States of America
Name principal investigator (PI, Co-PI....): Bill Scherlis; David Garlan
Funding entity or bodies:
National Security Agency
City funding entity: United States of America

Start-End date: 01/02/2014 - 01/03/2017

9 **Name of the project:** Combining Deliberative and Reactive Approaches to Realize Intelligent Self-Adaptation
Entity where project took place: Carnegie Mellon   **Type of entity:** University
University
City of entity: Pittsburgh, United States of America
Name principal investigator (PI, Co-PI....): David Garlan
Funding entity or bodies:
Office of Naval Research - US Navy

Start-End date: 01/02/2013 - 01/02/2017

10 **Name of the project:** Moving Target
Entity where project took place: Carnegie Mellon University   **Type of entity:** University
City of entity: Pittsburgh, United States of America
Name principal investigator (PI, Co-PI....): David Garlan
Funding entity or bodies:
US Departamento of Defense (DoD)   **Type of entity:** State agency
City funding entity: United States of America

Start-End date: 01/10/2015 - 01/09/2016

11 **Name of the project:** Mixed Initiative, Cooperative Self-Adaptation for Systems of Systems
Entity where project took place: Carnegie Mellon University   **Type of entity:** University
City of entity: Pittsburgh, United States of America
Name principal investigator (PI, Co-PI....): David Garlan
Funding entity or bodies:
Office of Naval Research - US Navy   **Type of entity:** State agency
City funding entity: United States of America

Start-End date: 01/01/2013 - 01/12/2015

12 **Name of the project:** Assuring Dependability in Architecture-Based Adaptive Systems
Entity where project took place: Universidade de Coimbra   **Type of entity:** University
City of entity: Coimbra, Norte, Portugal
Name principal investigator (PI, Co-PI....): Rogério de Lemos; Marco Vieira
Funding entity or bodies:
Fundação para a Ciência e a Tecnologia   **Type of entity:** State agency
City funding entity: Portugal

Start-End date: 10/01/2011 - 30/04/2013

13 **Name of the project:** Techniques de vérification et conception de systèmes cyber-physiques
Entity where project took place: INRIA   **Type of entity:** Public Research Body
City of entity: Grenoble, Rhône-Alpes, France
Name principal investigator (PI, Co-PI....): Gregor Goessler; Antoine Girard
Funding entity or bodies:
Agence National de la Recherche (ANR)   **Type of entity:** State agency
City funding entity: France

Start-End date: 20/01/2010 - 31/12/2010

14 **Name of the project:** Composición de software fiable en entornos ubicuos
Entity where project took place: Universidad de Málaga   **Type of entity:** University
City of entity: Málaga, Andalusia, Spain
Start-End date: 01/01/2009 - 31/12/2009
Total amount: 405.350 €

15 **Name of the project:** Ingeniería del Software
Entity where project took place: Universidad de Málaga   **Type of entity:** University
City of entity: Málaga, Andalusia, Spain
Name principal investigator (PI, Co-PI....): José María Troya Linero
Funding entity or bodies:
Junta de Andalucía   **Type of entity:** Gobierto regional

Start-End date: 01/10/2007 - 31/12/2009

16 **Name of the project:** Construcción y adaptación de servicios de software fiables
Entity where project took place: Universidad de Málaga   **Type of entity:** University
City of entity: Málaga, Andalusia, Spain
Start-End date: 01/10/2007 - 30/09/2008
Total amount: 72.600 €

17 **Name of the project:** SoCUS: Social Computing for Urban Sustainability
Entity where project took place: University of Malaga   **Type of entity:** University
City of entity: Malaga, Andalusia, Spain
Name principal investigator (PI, Co-PI....): Javier Camara Moreno; Javier Troya Castilla
Nº of researchers: 6

Name of the programme: Proyectos Estratégicos Orientados a la Transición Ecológica y a la Transición Digital (TED 2021)
Code according to the funding entity: TED2021-130523B-I00
Start date: 01/12/2022   **Duration:** 2 years
Sub-project amount: 192.280 €

R&D non-competitive contracts, agreements or projects with public or private entities

1 **Name of the project:** Assurance of Online Learning for Robotic and Autonomous
Type of project: Basic research (including archaeological digs, etc)   **Entity where project took place:** University of York
Entity where project took place: University of York
Name principal investigator (PI, Co-PI....): Radu Calinescu; Javier Cámara Moreno
Nº of researchers: 3
Funding entity or bodies:
Lloyd's Register Foundation   **Type of entity:** Foundation
City funding entity: United Kingdom

Start date: 01/10/2021   **Duration:** 3 years
Total amount: 113.577 €

2 **Name of the project:** Multi-Robot Systems for the Inspection and Maintenance of Nuclear Fusion Infrastructure
Name principal investigator (PI, Co-PI....): Radu Calinescu; Javier Cámara Moreno
Funding entity or bodies:

UK Atomic Energy Authority (UKAEA) **Type of entity:** State agency
City funding entity: United Kingdom

Start date: 01/10/2020

Scientific and technological activities

Scientific production

Publications, scientific and technical documents

1 Raquel Sánchez Salas; Javier Troya; Javier Cámara. Automated Planning for Task-Based Cyber-Physical Systems under Multiple Sources of Uncertainty. ACM Transactions on Autonomous and Adaptive Systems. 06/05/2025.
Type of production: Scientific paper **Format:** Journal
Total no. authors: 3 **Corresponding author:** No

2 Javier Cámara Moreno. Exploring the interaction of design variability and stochastic operational uncertainties in software-intensive systems through the lens of modeling. Software and Systems Modeling. 24 - 3, pp. 629 - 650. 11/11/2024.
Type of production: Scientific paper **Format:** Journal
Total no. authors: 1 **Corresponding author:** Yes

3 Javier Cámara; Lola Burgueño; Javier Troya. Towards standarized benchmarks of LLMs in software modeling tasks: a conceptual framework. Software and Systems Modeling. 23 - 6, pp. 1309 - 1318. 03/09/2024.
Type of production: Scientific paper **Format:** Journal
Total no. authors: 3 **Corresponding author:** Yes

4 Carlos Aderaldo; Thiago Costa; Davi Vasconcelos; Nabor Mendonca; Javier Cámara; David Garlan. A declarative approach and benchmark tool for controlled evaluation of microservice resiliency patterns. Software Practice and Experience. 55 - 1, 28/08/2024.
Type of production: Scientific paper
Total no. authors: 6 **Corresponding author:** No

5 Bruno Sousa; Duarte Dias; Nuno Antunes; Javier Cámara; Ryan Wagner; Bradley Schmerl; David Garlan; Pedro Fidalgo. MONDEO-Tactics5G: Multistage botnet detection and tactics for 5G/6G networks. Computers and Security. 140, 01/05/2024.
Type of production: Scientific paper **Format:** Journal
Total no. authors: 8 **Corresponding author:** No

6 Javier Cámara Moreno; Javier Troya Castilla; Julio Montes Torres; Francisco Jaime. Generative AI in the Software Modeling Classroom: An Experience Report With ChatGPT and Unified Modeling Language. IEEE Software. 41 - 6, 08/04/2024.
Type of production: Scientific paper **Format:** Journal
Total no. authors: 4 **Corresponding author:** Yes

7 Bradley Schmerl; David Garlan; Rebekka Wohlrab; Javier Cámara Moreno. Focusing on What Matters: Explaining Quality Tradeoffs in Software-Intensive Systems Via Dimensionality Reduction. IEEE Software. 41 - 1, 03/10/2023.
Type of production: Scientific paper **Format:** Journal
Total no. authors: 4 **Corresponding author:** Yes

8   Javier Cámara Moreno; David Garlan. Learning by re-doing: an experimental study on the impact of repetition of formative assessments in a formal methods course for software engineers. IEEE Software. 07/07/2023.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

9   Md. Abir Hossen; Sonam Kharade; Bradley Schmerl; Javier Cámara; Jason M. O'Kane; Ellen C. Czaplinski; Katherine A. Dzurilla; David Garlan; Pooyan Jamshidi. CaRE: Finding Root Causes of Configuration Issues in Highly-Configurable Robots. IEEE Robotics and Automation Letters. 8 - 7, pp. 4115 - 4122. IEEE, 29/05/2023.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: No

10   Javier Cámara Moreno; Javier Troya; Lola Burgueño; Antonio Vallecillo. On the assessment of generative AI in modeling tasks: an experience report with ChatGPT and UML. Software and Systems Modeling. 22 - 3, pp. 781 - 793. 22/05/2023.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

11   Javier Cámara Moreno; Rebekka Wohlrab; David Garlan; Bradley Schmerl. ExTrA: Explaining architectural design tradeoff spaces via dimensionality reduction. The Journal of Systems and Software. 198, Elsevier, 01/04/2023.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

12   Rebekka Wohlrab; Javier Cámara Moreno; David Garlan; Bradley Schmerl. Explaining quality attribute tradeoffs in automated planning for self-adaptive systems. The Journal of Systems and Software. Elsevier, 01/04/2023.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: No

13   Javier Cámara Moreno; Javier Troya Castilla; Antonio Vallecillo Moreno; Nelly Bencomo; Radu Calinescu; Betty Cheng; David Garlan; Bradley Schmerl. The Uncertainty Interaction Problem in Self-Adaptive Systems. Software and Systems Modeling. 21 - 4, Springer, 17/08/2022.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

14   Javier Cámara Moreno; David Garlan; Bradley Schmerl. Synthesizing tradeoff spaces with quantitative guarantees for families of software systems. The Journal of Systems and Software. 152, pp. 33 - 49. Elsevier, 27/02/2019.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

15   Jonathan Aldrich; David Garlan; Christian Kaestner; Claire Le Goues; Anahita Mohseni-Kabir; Ivan Ruchkin; Selva Samuel; Bradley Schmerl; Christopher Timperley; Manuela Veloso; Ian Voysey; Joydeep Biswas; Arjun Guha; Jarrett Holtz; Javier Cámara Moreno; Pooyan Jamshidi. Model-Based Adaptation for Robotics Software. IEEE Software. 36 - 2, pp. 83 - 90. IEEE, 22/02/2019.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: No

16   Javier Cámara Moreno; Wenxin Peng; David Garlan; Bradley Schmerl. Reasoning about sensing uncertainty and its reduction in decision-making for self-adaptive systems. Science of Computer Programming. 167, pp. 51 - 69. Elsevier, 17/07/2018.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

17 Javier Cámara Moreno; Bradley Schmerl; Gabriel Moreno; David Garlan. MOSAICO: Offline synthesis of adaptation strategy repertoires with flexible trade-offs. Automated Software Engineering. 25 - 3, pp. 595 - 626. Springer, 07/05/2018.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

18 Gabriel Moreno; Javier Cámara Moreno; David Garlan; Bradley Schmerl. Flexible and efficient decision-making for proactive latency-aware self-adaptation. ACM Transactions on Autonomous and Adaptive Systems. 13 - 1, pp. 1 - 36. ACM, 01/04/2018.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: No

19 Javier Cámara Moreno; Rogério de Lemos; Nuno Laranjeiro; Rafael Ventura; Marco Vieira. Robustness-driven resilience evaluation of self-adaptive software systems. IEEE Transactions on Dependable and Secure Computing. 14 - 1, pp. 50 - 63. IEEE, 01/01/2017.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

20 Javier Cámara Moreno; Antónia Lopes; David Garlan; Bradley Schmerl. Adaptation Impact and Environment Models for Architecture-Based Self-Adaptive Systems. Science of Computer Programming. 127, pp. 50 - 75. Elsevier, 13/01/2016.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

21 Javier Cámara Moreno; Gabriel Moreno; David Garlan; Bradley Schmerl. Analyzing Latency-Aware Self-Adaptation Using Stochastic Games and Simulations. ACM Transactions on Autonomous and Adaptive Systems. 10 - 4, pp. 1 - 23. ACM, 01/01/2016.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

22 Javier Cámara Moreno; Pedro Correia; Rogério de Lemos; David Garlan; Pedro Gomes; Bradley Schmerl; Rafael Ventura. Incorporating architecture-based self-adaptation into an adaptive industrial software system. The Journal of Systems and Software. 122, pp. 507 - 523. Elsevier, 09/10/2015.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

23 Javier Cámara Moreno; Rogério de Lemos; Marco Vieira; Raquel Almeida; Rafael Ventura. Architecture-Based Resilience Evaluation for Self-Adaptive Systems. Computing. 95 - 8, pp. 689 - 722. Springer, 01/08/2013.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

24 Javier Cámara Moreno; Gwen Salaun; Carlos Canal Velasco; Meriem Ouederni. Interactive Specification and Verification of Behavioural Adaptation Contracts. Information and Software Technology. 54 - 7, pp. 701 - 723. Elsevier, 07/02/2012.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

25 Carlos Canal Velasco; Javier Cámara Moreno; Gwen Salaun. Structural Reconfiguration of Systems under Behavioral Adaptation. Science of Computer Programming. 78, pp. 46 - 64. Elsevier, 25/09/2011.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: No

26 Javier Cámara Moreno; Gwen Salaun; Carlos Canal. Composition and Run-Time Adaptation of Mismatching Behavioural Transactions. Journal of Universal Computer Science. 14 - 13, pp. 2182 - 2211. 01/07/2008.
Type of production: Scientific paper   **Format:** Journal
Corresponding author: Yes

Works submitted to national or international conferences

1 **Title of the work:** Automated Planning for Adaptive Cyber-Physical Systems under Uncertainty in Temporal Availability Constraints
Name of the conference: 19th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2024)
Type of event: Conference
Corresponding author: No
City of event: Lisbon, Portugal
Date of event: 15/04/2024
End date: 16/04/2024
Organising entity: IEEE/ACM
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Raquel Sánchez Salas; Javier Troya; Javier Cámara Moreno. "Hey! Preparing Humans to do Tasks in Self-adaptive Systems".

2 **Title of the work:** Towards Proactive Decentralized Adaptation of Unmanned Aerial Vehicles for Wildfire Tracking
Name of the conference: 19th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2024)
Type of event: Conference
Corresponding author: No
City of event: Lisbon, Portugal
Date of event: 15/04/2024
End date: 16/04/2024
Organising entity: IEEE/ACM
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Enrique Vílchez; Javier Troya; Javier Cámara Moreno. "Hey! Preparing Humans to do Tasks in Self-adaptive Systems".

3 **Title of the work:** Uncertainty Flow Diagrams: Towards a Systematic Representation of Uncertainty Propagation and Interaction in Adaptive Systems
Name of the conference: 19th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2024)
Type of event: Conference
Corresponding author: Yes
City of event: Lisbon, Portugal
Date of event: 15/04/2024
End date: 16/04/2024
Organising entity: IEEE/ACM
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Javier Cámara Moreno; Sebastian Hahner; Diego Perez Palacin; Antonio Vallecillo; Maribel Acosta; Nelly Bencomo; Radu Calinescu; Simos Gerasimou. "Hey! Preparing Humans to do Tasks in Self-adaptive Systems".

4 **Title of the work:** Wildfire-UAVSim: An Exemplar for Evaluation of Adaptive Cyber-Physical Systems in Partially-Observable Environments
Name of the conference: 19th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2024)
Type of event: Conference
Corresponding author: No
City of event: Lisbon, Portugal
Date of event: 15/04/2024
End date: 16/04/2024
Organising entity: IEEE/ACM
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Enrique Vílchez; Javier Troya; Javier Cámara Moreno. "Hey! Preparing Humans to do Tasks in Self-adaptive Systems".

5 **Title of the work:** Security Countermeasure Selection for Component-Based Software-Intensive Systems
Name of the conference: 22nd IEEE International Conference on Software Quality, Reliability and Security, QRS 2022
Corresponding author: No
City of event: Guangzhou, China
Date of event: 05/12/2022
End date: 09/12/2022
Organising entity: IEEE
Charilaos Skandylas; Narges Khakpour; Javier Cámara.

6 **Title of the work:** Addressing the uncertainty interaction problem in software-intensive systems: challenges and desiderata
Name of the conference: 25th International Conference on Model Driven Engineering Languages and Systems, MODELS 2022
Corresponding author: Yes
City of event: Montreal, Canada
Date of event: 23/10/2022
End date: 28/10/2022
Organising entity: IEEE/ACM
Javier Cámara; Radu Calinescu; Betty H.C. Cheng; Bradley Schmerl; Javier Troya; Antonio Vallecillo.

7 **Title of the work:** Towards Scalable Multi-robot Systems by Partitioning the Task Domain
Name of the conference: Towards Autonomous Robotic Systems - 23rd Annual Conference, TAROS 2022
Type of event: Conference
Corresponding author: No
City of event: Culham, United Kingdom
Date of event: 07/09/2022
End date: 09/09/2022
Brendan Devlin-Hill; Radu Calinescu; Javier Cámara; Ipek Caliskanelli. "Towards Autonomous Robotic Systems - 23rd Annual Conference, TAROS 2022, Proceedings".

8   **Title of the work:** Evolutionary-Guided Synthesis of Verified Pareto Optimal Policies
Name of the conference: 36th IEEE/ACM International Conference on Automated Software Engineering (ASE 2021)
Type of event: Conference   **Geographical area:** Non EU International
Corresponding author: No
City of event: Melbourne (Online), Australia
Date of event: 14/11/2021
End date: 20/11/2021
Organising entity: IEEE/ACM
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Simos Gerasimou; Javier Cámara Moreno; Radu Calinescu; Naif Alasmari; Faisal Alhwikem; Xinwei Fang. "Evolutionary-Guided Synthesis of Verified Pareto Optimal Policies".

9   **Title of the work:** Explaining Architectural Design Tradeoff Spaces: A Machine Learning Approach
Name of the conference: 15th European Conference on Software Architecture (ECSA 2021)
Type of event: Conference   **Geographical area:** European Union
Corresponding author: Yes
City of event: Vaxjo (online), Sweden
Date of event: 13/09/2021
End date: 17/09/2021
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Javier Cámara Moreno; Mariana Silva; David Garlan; Bradley Schmerl. "Explaining Architectural Design Tradeoff Spaces: A Machine Learning Approach".

10   **Title of the work:** Scheduling Multi-robot Missions with Joint Tasks and Heterogeneous Robot Teams
Name of the conference: Towards Autonomous Robotic Systems - 22nd Annual Conference, TAROS 2021
Type of event: Conference
Corresponding author: No
City of event: Lincoln, United Kingdom
Date of event: 08/09/2021
End date: 10/09/2021
Gricel Vazquez; Radu Calinescu; Javier Cámara. "Towards Autonomous Robotic Systems - 23rd Annual Conference, TAROS 2022, Proceedings".

11   **Title of the work:** Hey! Preparing Humans to do Tasks in Self-adaptive Systems
Name of the conference: 16th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2021)
Type of event: Conference
Corresponding author: No
City of event: Madrid (online), Community of Madrid, Spain
Date of event: 18/05/2021
End date: 21/05/2021
Organising entity: IEEE/ACM
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Nianyu Li; Javier Cámara Moreno; David Garlan; Bradley Schmerl. "Hey! Preparing Humans to do Tasks in Self-adaptive Systems".

12 **Title of the work:** Model-Based Analysis of Microservice Resiliency Patterns
Name of the conference: IEEE International Conference on Software Architecture (ICSA 2020)
Type of event: Conference
Corresponding author: Yes
City of event: Salvador, Brazil
Date of event: 02/11/2020
End date: 06/11/2020
Organising entity: IEEE   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes

Nabor Mendonca; Carlos Mendes Aderaldo; Javier Cámara Moreno; David Garlan. "Model-Based Analysis of Microservice Resiliency Patterns".

13 **Title of the work:** Quantitative Verification-Aided Machine Learning: A Tandem Approach for Architecting Self-Adaptive IoT Systems
Name of the conference: IEEE International Conference on Software Architecture (ICSA 2020)
Type of event: Conference
Corresponding author: Yes
City of event: Salvador, Brazil
Date of event: 02/11/2020
End date: 06/11/2020
Organising entity: IEEE   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes

Javier Cámara Moreno; Henry Muccini; Karthik Vaidhyanathan. "Quantitative Verification-Aided Machine Learning: A Tandem Approach for Architecting Self-Adaptive IoT Systems".

14 **Title of the work:** Voyager: a Software Architecture Trade-off Explorer
Name of the conference: 14th European Conference on Software Architecture (ECSA 2020)
Type of event: Conference
Corresponding author: No
City of event: L'Aquila (online), Italy
Date of event: 14/09/2020
End date: 18/09/2020
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Jason Mashinchi; Javier Cámara Moreno. "Voyager: a Software Architecture Trade-off Explorer".

15 **Title of the work:** Reasoning about When to Provide Explanation for Human-in-the-loop Self-Adaptive Systems
Name of the conference: IEEE Conference on Autonomic Computing and Self-organizing Systems (ACSOS 2020)
Type of event: Conference
Corresponding author: No
City of event: Washington, D.C. (online), United States of America
Date of event: 17/08/2020
End date: 21/08/2020
Organising entity: IEEE   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Nianyu Li; Javier Cámara Moreno; David Garlan; Bradley Schmerl. "Reasoning about When to Provide Explanation for Human-in-the-loop Self-Adaptive Systems".

16 **Title of the work:** HaiQ: Synthesis of Software Design Spaces with Structural and Probabilistic Guarantees
Name of the conference: International Conference on Formal Methods in Software Engineering (FormaliSE)
Type of event: Conference
Corresponding author: Yes
City of event: Seul (online), Republic of Korea
Date of event: 13/07/2020
End date: 13/07/2020
Organising entity: IEEE/ACM   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Javier Cámara Moreno. "HaiQ: Synthesis of Software Design Spaces with Structural and Probabilistic Guarantees".

17 **Title of the work:** Software Architecture and Task Plan Co-Adaptation for Mobile Service Robots
Name of the conference: In Proceedings of the 15th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2020)
Type of event: Conference
Corresponding author: Yes
City of event: Seul (online), Republic of Korea
Date of event: 29/06/2020
End date: 03/07/2020
Organising entity: IEEE/ACM   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Javier Cámara Moreno; Bradley Schmerl; David Garlan. "Software Architecture and Task Plan Co-Adaptation for Mobile Service Robots".

18 **Title of the work:** Towards Bridging the Gap between Control and Self-Adaptive System Properties
Name of the conference: In Proceedings of the 15th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2020)
Type of event: Conference
Corresponding author: Yes
City of event: Seul (online), Republic of Korea
Date of event: 29/06/2020
End date: 03/07/2020
Organising entity: IEEE/ACM   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Javier Cámara Moreno; Alessandro Papadopoulos; Thomas Vogel; Danny Weyns; David Garlan; Shihong Huang; Kenji Tei. "Towards Bridging the Gap between Control and Self-Adaptive System Properties".

19 **Title of the work:** Machine learning meets quantitative planning: enabling self-adaptation in autonomous robots
Name of the conference: 14th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2019)
Type of event: Conference
Corresponding author: No
City of event: Montreal, Canada
Date of event: 25/05/2019
End date: 26/05/2019
Organising entity: IEEE/ACM   **Type of entity:** Associations and Groups

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Pooyan Jamshidi; Javier Cámara Moreno; Christian Kaestner; Bradley Schmerl; David Garlan. "Machine learning meets quantitative planning: enabling self-adaptation in autonomous robots".

---

20   **Title of the work:** Uncertainty Reduction in Self-Adaptive Systems

Name of the conference: 13th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2018)

Type of event: Conference

Corresponding author: No

City of event: Gothenmburg, Sweden

Date of event: 28/05/2018

End date: 29/05/2018

Organising entity: IEEE/ACM   **Type of entity:** Associations and Groups

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Gabriel Moreno; Javier Cámara Moreno; David Garlan; Mark Klein. "Uncertainty Reduction in Self-Adaptive Systems".

---

21   **Title of the work:** Event-Driven Bandwidth Allocation with Formal Guarantees for Camera Networks

Name of the conference: IEEE Real-Time Systems Symposium (RTSS 2017)

Type of event: Conference

Corresponding author: No

City of event: Paris, France

Date of event: 05/12/2017

End date: 08/12/2017

Organising entity: IEEE   **Type of entity:** Associations and Groups

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Gautham Nayak Seetanandi; Javier Cámara Moreno; Luis Almeida; Karl Erik Arzen; Martina Maggio. "Event-Driven Bandwidth Allocation with Formal Guarantees for Camera Networks".

---

22   **Title of the work:** Synthesis and Quantitative Verification of Tradeoff Spaces for Families of Software Systems

Name of the conference: 11th European Conference on Software Architecture (ECSA 2017)

Type of event: Conference

Corresponding author: Yes

City of event: Canterbury, United Kingdom

Date of event: 11/09/2017

End date: 15/09/2017

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Javier Cámara Moreno; David Garlan; Bradley Schmerl. "Synthesis and Quantitative Verification of Tradeoff Spaces for Families of Software Systems".

---

23   **Title of the work:** Comparing Model-Based Predictive Approaches to Self-Adaptation: CobRA and PLA

Name of the conference: 12th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2017)

Type of event: Conference

Corresponding author: No

City of event: Buenos Aires, Argentina

Date of event: 22/05/2017

End date: 23/05/2017
Organising entity: IEEE/ACM   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Gabriel Moreno; Alessandro Papadopoulos; Konstantinos Angelopoulos; Javier Cámara Moreno; Bradley Schmerl. "Comparing Model-Based Predictive Approaches to Self-Adaptation: CobRA and PLA".

24   **Title of the work:** Towards a Formal Framework for Hybrid Planning in Self-Adaptation
Name of the conference: 12th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2017)
Type of event: Conference
Corresponding author: No
City of event: Buenos Aires, Argentina
Date of event: 22/05/2017
End date: 23/05/2017
Organising entity: IEEE/ACM   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Ashutosh Pandey; Ivan Ruchkin; Bradley Schmerl; Javier Cámara Moreno. "Towards a Formal Framework for Hybrid Planning in Self-Adaptation".

25   **Title of the work:** Architecture Modeling and Analysis of Security in Android Systems
Name of the conference: 10th European Conference on Software Architecture (ECSA 2016)
Type of event: Conference
Corresponding author: No
City of event: Copenague, Denmark
Date of event: 28/11/2016
End date: 02/12/2016
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Bradley Schmerl; Jeffrey Gennari; Alireza Sadeghi; Hamid Bagheri; Sam Malek; Javier Cámara Moreno. "Architecture Modeling and Analysis of Security in Android Systems".

26   **Title of the work:** Hybrid Planning for Decision Making in Self-Adaptive Systems. 2016
Name of the conference: 10th IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO 2016)
Type of event: Conference
Corresponding author: No
City of event: Augsburg, Germany
Date of event: 12/09/2016
End date: 16/09/2016
Organising entity: IEEE   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Ashutosh Pandey; Gabriel Moreno; Javier Cámara. "Hybrid Planning for Decision Making in Self-Adaptive Systems. 2016".

27   **Title of the work:** Efficient Decision-Making under Uncertainty for Proactive Self-Adaptation
Name of the conference: 13th IEEE International Conference on Autonomic Computing (ICAC 2016)
Type of event: Conference
Corresponding author: No

City of event: Wuezburg, Germany
Date of event: 18/07/2016
End date: 22/07/2016
Organising entity: IEEE   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Gabriel Moreno; Javier Cámara Moreno; David Garlan; Bradley Schmerl. "Efficient Decision-Making under Uncertainty for Proactive Self-Adaptation".

28 **Title of the work:** Proactive Self-Adaptation under Uncertainty: a Probabilistic Model Checking Approach
Name of the conference: 10th Joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE 2015)
Type of event: Conference
Corresponding author: No
City of event: Bergamo, Italy
Date of event: 30/08/2015
End date: 04/09/2015
Organising entity: ACM SIGSOFT   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Javier Cámara Moreno; Gabriel Moreno; David Garlan; Bradley Schmerl. "Proactive Self-Adaptation under Uncertainty: a Probabilistic Model Checking Approach".

29 **Title of the work:** Reasoning about Human Participation in Self-Adaptive Systems
Name of the conference: 10th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2015)
Type of event: Conference
Corresponding author: Yes
City of event: Florencia, Italy
Date of event: 16/05/2015
End date: 24/09/2015
Organising entity: IEEE/ACM   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Javier Cámara Moreno; Gabriel Moreno; David Garlan. "Reasoning about Human Participation in Self-Adaptive Systems".

30 **Title of the work:** Optimal Planning for Architecture-Based Self-Adaptation via Model Checking of Stochastic Games
Name of the conference: 30th ACM Symposium on Applied Computing
Type of event: Conference
Corresponding author: Yes
City of event: Salamanca, Spain
Date of event: 13/04/2015
End date: 17/04/2015
Organising entity: ACM   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Javier Cámara Moreno; David Garlan; Bradley Schmerl; Ashutosh Pandey. "Optimal Planning for Architecture-Based Self-Adaptation via Model Checking of Stochastic Games".

31 **Title of the work:** Impact Models for Architecture-Based Self-Adaptative Systems
Name of the conference: 11th International Symposium on Formal Aspects of Component Software (FACS 2014)
Type of event: Conference
Corresponding author: Yes
City of event: Bertinoro, Italy
Date of event: 10/09/2014
End date: 12/09/2014
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Javier Cámara Moreno; Antónia Lopes; David Garlan; Bradley Schmerl. "Impact Models for Architecture-Based Self-Adaptative Systems".

32 **Title of the work:** Empirical Resilience Evaluation of an Architecture-based Self-Adaptive Software System
Name of the conference: 10th International ACM SIGSOFT Conference on the Quality of Software Architectures (QoSA 2014)
Type of event: Conference
Corresponding author: Yes
City of event: Lille, France
Date of event: 30/06/2014
End date: 04/07/2014
Organising entity: ACM SIGSOFT   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Javier Cámara Moreno; Pedro Correia; Rogério de Lemos; Marco Vieira. "Empirical Resilience Evaluation of an Architecture-based Self-Adaptive Software System".

33 **Title of the work:** Stochastic Game Analysis and Latency Awareness for Proactive Self-Adaptation
Name of the conference: 9th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2014)
Type of event: Conference
Corresponding author: Yes
City of event: Hyderabad, India
Date of event: 02/06/2014
End date: 03/06/2014
Organising entity: IEEE/ACM   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Javier Cámara Moreno; Gabriel Moreno; David Garlan. "Stochastic Game Analysis and Latency Awareness for Proactive Self-Adaptation".

34 **Title of the work:** Architecture-Based Self-Protection: Composing and Reasoning about Denial-of-Service Mitigations
Name of the conference: 1st Symposium and Bootcamp on the Science of Security (HotSoS 2014)
Type of event: Conference
Corresponding author: No
City of event: Raleigh, NC, United States of America
Date of event: 08/04/2014
End date: 09/04/2014
Organising entity: Science of Security Virtual Organisation   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes

Type of contribution: Scientific paper

Bradley Schmerl; Javier Cámara Moreno; Jeffrey Gennari; David Garlan; Paulo Casanova; Thomas J. Glazier; Jeffrey Barnes. "Architecture-Based Self-Protection: Composing and Reasoning about Denial-of-Service Mitigations".

---

35   **Title of the work:** Comparator: A Tool for Quantifying Behavioural Compatibility

Name of the conference: Fundamental Approaches to Software Engineering (FASE 2014)

Type of event: Conference

Corresponding author: No

City of event: Grenoble, France

Date of event: 05/04/2014

End date: 13/04/2014

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Meriem Ouederni; Gwen Salaun; Javier Cámara Moreno; Ernesto Pimentel Sánchez. "Comparator: A Tool for Quantifying Behavioural Compatibility".

---

36   **Title of the work:** Robustness Evaluation of the Rainbow Framework for Self-Adaptation

Name of the conference: 29th ACM Symposium on Applied Computing (SAC 2014)

Type of event: Conference

Corresponding author: Yes

City of event: Gyeongju, Republic of Korea

Date of event: 24/03/2014

End date: 28/03/2014

Organising entity: ACM   **Type of entity:** Associations and Groups

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Javier Cámara Moreno; Rogério de Lemos; Nuno Laranjeiro; Rafael Ventura; Marco Vieira. "Robustness Evaluation of the Rainbow Framework for Self-Adaptation".

---

37   **Title of the work:** Evolving an Adaptive Industrial Software System to Use Architecture-based Self-Adaptation

Name of the conference: 8th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2013)

Type of event: Conference

Corresponding author: Yes

City of event: San Francisco, United States of America

Date of event: 20/05/2013

End date: 21/05/2013

Organising entity: IEEE/ACM   **Type of entity:** Associations and Groups

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Javier Cámara Moreno; Pedro Correia; Rogério de Lemos; David Garlan; Pedro Gomes; Bradley Schmerl; Rafael Ventura. "Evolving an Adaptive Industrial Software System to Use Architecture-based Self-Adaptation".

---

38   **Title of the work:** Robustness Evaluation of Controllers in Self-Adaptive Software Systems

Name of the conference: 6th Latin American Symposium on Dependable Computing (LADC 2013)

Type of event: Conference

Corresponding author: Yes

City of event: Rio de Janeiro, Brazil

Date of event: 01/04/2013

End date: 05/04/2013

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Javier Cámara Moreno; Rogério de Lemos; Nuno Laranjeiro; Rafael Ventura; Marco Vieira. "Robustness Evaluation of Controllers in Self-Adaptive Software Systems".

39   **Title of the work:** Evaluation of Resilience in Self-Adaptive Systems Using Probabilistic Model-Checking

Name of the conference: 7th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2012)

Type of event: Conference

Corresponding author: Yes

City of event: Zurich, Switzerland

Date of event: 04/06/2012

End date: 05/06/2012

Organising entity: IEEE/ACM   **Type of entity:** Associations and Groups

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Javier Cámara Moreno; Rogério de Lemos. "Evaluation of Resilience in Self-Adaptive Systems Using Probabilistic Model-Checking".

40   **Title of the work:** Safety Controller Synthesis for Switched Systems using Multi-scale Symbolic Models

Name of the conference: 50th IEEE Conference on Decision and Control and European Control Conference (IEEE CDC-ECC 2011)

Type of event: Conference

Corresponding author: Yes

City of event: Orlando, United States of America

Date of event: 12/12/2011

End date: 15/12/2011

Organising entity: IEEE   **Type of entity:** Associations and Groups

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Javier Cámara Moreno; Antoine Girard; Gregor Goessler. "Safety Controller Synthesis for Switched Systems using Multi-scale Symbolic Models".

41   **Title of the work:** Synthesis of Switching Controllers using Approximately Bisimilar Multiscale Abstractions

Name of the conference: 14th International Conference on Hybrid Systems: Computation and Control (HSCC 2011)

Type of event: Conference

Corresponding author: Yes

City of event: Chicago, United States of America

Date of event: 12/04/2011

End date: 14/04/2011

Organising entity: ACM   **Type of entity:** Associations and Groups

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Javier Cámara Moreno; Antoine Girard; Gregor Goessler. "Synthesis of Switching Controllers using Approximately Bisimilar Multiscale Abstractions".

42   **Title of the work:** A Case Study in Model-based Adaptation of Web Services

Name of the conference: 4th International Symposium On Leveraging Applications of Formal Methods, Verification and Validation (ISoLA 2010)

Type of event: Conference

City of event: Heraklion, Greece
Date of event: 18/10/2010
End date: 21/10/2010
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Javier Cámara Moreno; José Antonio Martín Baena; Gwen Salaun; Carlos Canal Velasco; Ernesto Pimentel Sánchez. "A Case Study in Model-based Adaptation of Web Services".

43 **Title of the work:** Interactive Specification and Verification of Behavioural Adaptation Contracts
Name of the conference: 9th International Conference on Quality Software (QSIC 2009)
Type of event: Conference
Corresponding author: Yes
City of event: Jeju, Republic of Korea
Date of event: 24/08/2009
End date: 25/08/2009
Organising entity: IEEE   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Javier Cámara Moreno; Gwen Salaun; Carlos Canal Velasco. "Interactive Specification and Verification of Behavioural Adaptation Contracts".

44 **Title of the work:** Facilitating Controlled Tests of Website Design Changes: a Systematic Approach
Name of the conference: 9th International Conference on Web Engineering (ICWE 2009)
Type of event: Conference
Corresponding author: Yes
City of event: San Sebastián, Spain
Date of event: 22/06/2009
End date: 26/06/2009
Organising entity: International Society for Web   **Type of entity:** Associations and Groups
Engineering
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Alfred Kobsa; Javier Cámara Moreno. "Facilitating Controlled Tests of Website Design Changes: a Systematic Approach".

45 **Title of the work:** ITACA: An Integrated Toolbox for the Automatic Composition and Adaptation of Web Services
Name of the conference: 31st International Conference on Software Engineering (ICSE 2009)
Type of event: Conference
Corresponding author: Yes
City of event: Vancouver, Canada
Date of event: 16/05/2009
End date: 24/05/2009
Organising entity: IEEE/ACM   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper

Javier Cámara Moreno; José Antonio Martín Baena; Gwen Salaun; Javier Cubo Villalba; Meriem Ouederni; Carlos Canal Velasco; Ernesto Pimentel Sánchez. "ITACA: An Integrated Toolbox for the Automatic Composition and Adaptation of Web Services".

46 **Title of the work:** Clint: A Composition Language Interpreter
Name of the conference: Fundamental Approaches to Software Engineering (FASE 2008)
Type of event: Conference
Corresponding author: Yes
City of event: Budapest, Hungary
Date of event: 29/03/2008
End date: 06/04/2008
Organising entity: European Joint Conferences on   **Type of entity:** Associations and Groups
Theory and Practice of Software Association
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Javier Cámara Moreno; Gwen Salaun; Carlos Canal Velasco. "Clint: A Composition Language Interpreter".

47 **Title of the work:** Enabling Adaptivity in User Interfaces
Name of the conference: 1st European Conference on Software Architectures (ECSA 2007)
Type of event: Conference
Corresponding author: Yes
City of event: Madrid, Spain
Date of event: 24/09/2007
End date: 26/09/2007
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Javier Cámara Moreno; Carlos Canal Velasco; Javier Cubo Villalba; Juan Manuel Murillo Rodríguez.
"Enabling Adaptivity in User Interfaces".

48 **Title of the work:** Run-time Composition and Adaptation of Mismatching Behavioural Transactions
Name of the conference: 5th IEEE International Conference on Software Engineering and Formal Methods
(SEFM 2007)
Type of event: Conference
Corresponding author: Yes
City of event: Londres, United Kingdom
Date of event: 10/09/2007
End date: 14/09/2007
Organising entity: IEEE   **Type of entity:** Associations and Groups
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Javier Cámara Moreno; Gwen Salaun; Carlos Canal Velasco. "Run-time Composition and Adaptation of
Mismatching Behavioural Transactions".

49 **Title of the work:** Context-Based Adaptation of Component Behavioural Interfaces
Name of the conference: 9th International Conference on Coordination Languages and Models
(Coordination 2007)
Type of event: Conference
Corresponding author: No
City of event: Paphos, Cyprus
Date of event: 06/06/2007
End date: 08/06/2007
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Javier Cubo Villalba; Gwen Salaun; Javier Cámara Moreno; Carlos Canal Velasco; Ernesto Pimentel
Sánchez. "Context-Based Adaptation of Component Behavioural Interfaces".

R&D management and participation in scientific committees

Scientific, technical and/or assessment committees

1 **Committee title:** Program Committee of the 19th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2024)
Geographical area: Non EU International
Start-End date: 2024 - 2024

2 **Committee title:** Program Committee of the 21st International Conference on Software Architecture (ICSA 2024)
Start-End date: 2024 - 2024

3 **Committee title:** Steering Committee of the International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS)
Geographical area: Non EU International
Start-End date: 2021 - 2024

4 **Committee title:** Program Committee (Workshops/Tutorials) of the 17th European Conference on Software Architecture (ECSA 2023)
Geographical area: European Union
Start-End date: 2023 - 2023

5 **Committee title:** Program Committee of the 18th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2023)
Geographical area: Non EU International
Start-End date: 2023 - 2023

6 **Committee title:** Program Committee of the 20th International Conference on Software Architecture (ICSA 2023)
Start-End date: 2023 - 2023

7 **Committee title:** Program Committee of the 25th International Conference on Coordination Models and Languages (Coordination 2023)
Start-End date: 2023 - 2023

8 **Committee title:** Program Committee of the 6th International Workshop on Artificial Intelligence Safety Engineering (WAISE)
Start-End date: 2023 - 2023

9 **Committee title:** Program committee of the 6th International Workshop on Robotics Software Engineering (RoSE 2023)
Geographical area: Non EU International
Start-End date: 2023 - 2023

10 **Committee title:** Program Committee (Tools and Demonstrations) of the 16th European Conference on Software Architecture (ECSA 2022)
Geographical area: European Union
Start-End date: 2022 - 2022

11 **Committee title:** Program Committee (Workshops/Tutorials) of the 16th European Conference on Software Architecture (ECSA 2022)
Geographical area: European Union
Start-End date: 2022 - 2022

12 **Committee title:** Program Committee of the 16th European Conference on Software Architecture (ECSA 2022)
Geographical area: European Union
Start-End date: 2022 - 2022

13 **Committee title:** Program Committee of the 17th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2022)
Geographical area: Non EU International
Start-End date: 2022 - 2022

14 **Committee title:** Program Committee of the International Conference on Formal Aspects of Component Software (FACS 2022)
Geographical area: Non EU International
Start-End date: 2022 - 2022

15 **Committee title:** Program committee of the 5th International Workshop on Robotics Software Engineering (RoSE 2022)
Geographical area: Non EU International
Start-End date: 2022 - 2022

16 **Committee title:** Program Committee of the 15th European Conference on Software Architecture (ECSA 2021)
Geographical area: European Union
Start-End date: 2021 - 2021

17 **Committee title:** Program Committee of the 16th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2021)
Geographical area: Non EU International
Start-End date: 2021 - 2021

18 **Committee title:** Program Committee of the 6th eCAS Workshop on Engineering Collective Adaptive Systems (eCAS 2021)
Geographical area: Non EU International
Start-End date: 2021 - 2021

19 **Committee title:** Program Committee of the International Conference on Formal Aspects of Component Software (FACS 2021)
Geographical area: Non EU International
Start-End date: 2021 - 2021

20 **Committee title:** Program committee of the 4th International Workshop on Robotics Software Engineering (RoSE 2021)
Geographical area: Non EU International
Start-End date: 2021 - 2021

21 **Committee title:** Program committee of the 5th International Workshop on Formal Approaches for Advanced Computing Systems (FAACS 2021)
Geographical area: European Union
Start-End date: 2021 - 2021

22 **Committee title:** Program Committee of the 15th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2020)
Geographical area: Non EU International
Start-End date: 2020 - 2020

23 **Committee title:** Program Committee of the 2020 Workshop on Self-Aware Computing (SeAC 2020)
Geographical area: European Union
Start-End date: 2020 - 2020

24 **Committee title:** Program Committee of the 4th International Workshop on Formal Approaches for Advanced Computing Systems (FAACS 2020)
Geographical area: European Union
Start-End date: 2020 - 2020

25 **Committee title:** Program committee of the 2nd International Workshop on Robotics Software Engineering (RoSE 2019)
Geographical area: Non EU International
Start-End date: 2019 - 2019

26 **Committee title:** Program Committee of the 12th European Conference on Software Architecture (ECSA 2018)
Geographical area: Non EU International
Start-End date: 2018 - 2018

27 **Committee title:** Program Committee of the 13th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2018)
Geographical area: Non EU International
Start-End date: 2018 - 2018

28 **Committee title:** Program Committee of the 14th European Dependable Computing Conference (EDCC 2018)
Geographical area: European Union
Start-End date: 2018 - 2018

29 **Committee title:** Program Committee of the 16th International Workshop on Foundations of Coordination Languages and Self-Adaptive Systems (FOCLASA 2018)
Geographical area: European Union
Start-End date: 2018 - 2018

30 **Committee title:** Program Committee of the 48th IEEE/IFIP International Conference on Dependable Systems and Networks (DSN 2018)
Geographical area: Non EU International
Start-End date: 2018 - 2018

31 **Committee title:** Program Committee of the Workshop on Designing Resilient Intelligent Systems for Testability and Reliability (STaR 2018)
Geographical area: European Union

Start-End date: 2018 - 2018

32   **Committee title:** Program committee of the 1st International Workshop on Robotics Software Engineering (RoSE 2018)
Geographical area: Non EU International
Start-End date: 2018 - 2018

33   **Committee title:** Program Committee of the 11th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE 2017), Artifact track
Geographical area: Non EU International
Start-End date: 2017 - 2017

34   **Committee title:** Program Committee of the 12th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2017)
Geographical area: Non EU International
Start-End date: 2017 - 2017

35   **Committee title:** Program Committee of the 13th European Dependable Computing Conference (EDCC 2017)
Geographical area: European Union
Start-End date: 2017 - 2017

36   **Committee title:** Program Committee of the 14th International Conference on Formal Aspects of Component Software (FACS 2017)
Geographical area: Non EU International
Start-End date: 2017 - 2017

37   **Committee title:** Program Committee of the 15th International Workshop on Foundations of Coordination Languages and Self-Adaptive Systems (FOLCASA 2017)
Geographical area: Non EU International
Start-End date: 2017 - 2017

38   **Committee title:** Program Committee of the 2017 International Workshop on Recent Advances in the Dependability Assessment of Complex Systems (RADIANCE 2017).
Geographical area: European Union
Start-End date: 2017 - 2017

39   **Committee title:** Program Committee of the 2017 Workshop on Self-Aware Computing (SeAC 2017)
Geographical area: Non EU International
Start-End date: 2017 - 2017

40   **Committee title:** Program Committee of the 39th International Conference on Software Engineering (ICSE 2017), Demo Track
Geographical area: Non EU International
Start-End date: 2017 - 2017

41   **Committee title:** Program Committee of the International Workshop on Autonomic High Performance Computing 2017 (AHPC 2017)
Geographical area: Non EU International
Start-End date: 2017 - 2017

42   **Committee title:** Program Committee of the 11th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2016)
Geographical area: Non EU International
Start-End date: 2016 - 2016

43   **Committee title:** Program Committee of the 2nd International Workshop on Recent Advances in the Dependability Assessment of Complex Systems (RADIANCE 2016)
Geographical area: European Union
Start-End date: 2016 - 2016

44   **Committee title:** Program Committee of the 3rd IEEE Workshop on Quality Assurance for Self-Adaptive, Self-Organising Systems (QA4SASO 2016)
Geographical area: Non EU International
Start-End date: 2016 - 2016

45   **Committee title:** Program Committee of the 10th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2015)
Geographical area: Non EU International
Start-End date: 2015 - 2015

46   **Committee title:** Program Committee of the 17th IEEE International Conference on High Performance Computing and Communications (HPCC 2015)
Geographical area: European Union
Start-End date: 2015 - 2015

47   **Committee title:** Program Committee of the 1st International Workshop on Control Theory for Software Engineering (CTSE 2015)
Geographical area: European Union
Start-End date: 2015 - 2015

48   **Committee title:** Program Committee of the 1st International Workshop on Recent Advances in the Dependability Assessment of Complex Systems (RADIANCE 2015)
Geographical area: European Union
Start-End date: 2015 - 2015

49   **Committee title:** Program Committee of the 13th International Workshop on Foundations of Coordination Languages and Self Adaptive Systems (FOCLASA 2014)
Geographical area: European Union
Start-End date: 2014 - 2014

50   **Committee title:** Program Committee of the 9th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2014)
Geographical area: Non EU International
Start-End date: 2014 - 2014

51   **Committee title:** Program Committee of the 12th International Workshop on Foundations of Coordination Languages and Self Adaptive Systems (FOCLASA 2013)
Geographical area: European Union
Start-End date: 2013 - 2013

52 **Committee title:** Program Committee of the 7th European Conference on Software Architecture (ECSA 2013)
Geographical area: European Union
Start-End date: 2013 - 2013

Organization of R&D activities

1 **Title of the activity:** NII-Shonan Meeting on Uncertainty Interaction in Software-intensive Systems (UNISON)
Type of activity: Seminario de investigación   **Geographical area:** Non EU International
Convening entity: National Institute of Informatics (NII)
City convening entity: Japan
Type of participation: Organiser
Start-End date: 2026 - 2026

2 **Title of the activity:** 6th IEEE International Conference on Autonomic Computing and Self-Organizing Systems - ACSOS 2025
Type of activity: Conferencia   **Geographical area:** Non EU International
Type of participation: Organiser
Start-End date: 2025 - 2025

3 **Title of the activity:** 19th International Conference on Formal Aspects of Component Software (FACS 2023)
Type of activity: Conferencia   **Geographical area:** Non EU International
Type of participation: Organiser
Start-End date: 2023 - 2023

4 **Title of the activity:** International Conference on Software Architecture (ICSA 2023)
Type of activity: Conferencia   **Geographical area:** Non EU International
Type of participation: Organiser
Start-End date: 2023 - 2023

5 **Title of the activity:** International Conference on Software Architecture (ICSA 2021)
Type of activity: Conferencia   **Geographical area:** Non EU International
Type of participation: Organiser
Start-End date: 2021 - 2021

6 **Title of the activity:** 14th European Conference on Software Architecture (ECSA 2020)
Type of activity: Conferencia   **Geographical area:** European Union
Type of participation: Organiser
Start-End date: 2020 - 2020

7 **Title of the activity:** NII-Shonan Meeting on Controlled Adaptation of Self-adaptive Systems (CASaS 3)
Type of activity: Seminario de investigación   **Geographical area:** Non EU International
Convening entity: National Institute of Informatics (NII)
City convening entity: Japan
Type of participation: Organiser
Start-End date: 2020 - 2020

8 **Title of the activity:** 13th European Conference on Software Architecture (ECSA 2019)
   Type of activity: Conferencia   **Geographical area:** European Union
   Type of participation: Organiser
   Start-End date: 2019 - 2019

9 **Title of the activity:** 14th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2019)
   Type of activity: Simposio   **Geographical area:** Non EU International
   Type of participation: Organiser
   Start-End date: 2019 - 2019

10 **Title of the activity:** 7th International Conference on Software Engineering and Formal Methods (SEFM 2019)
   Type of activity: Conferencia   **Geographical area:** Non EU International
   Type of participation: Organiser
   Start-End date: 2019 - 2019

11 **Title of the activity:** 12th International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2017)
   Type of activity: Simposio   **Geographical area:** Non EU International
   Type of participation: Organiser
   Start-End date: 2017 - 2017

12 **Title of the activity:** 13th IEEE International Conference on Autonomic Computing (ICAC 2016)
   Type of activity: Conferencia   **Geographical area:** Non EU International
   Type of participation: Organiser
   Start-End date: 2016 - 2016

13 **Title of the activity:** 9th International Symposium on Formal Aspects of Component Software (FACS 2012)
   Type of activity: Simposio   **Geographical area:** Non EU International
   Type of participation: Organiser
   Start-End date: 2012 - 2012

14 **Title of the activity:** 1st International Workshop on Assurances for Self-Adaptive Systems (ASAS 2011)
   Type of activity: Taller   **Geographical area:** Non EU International
   Type of participation: Organiser
   Start-End date: 2011 - 2011

15 **Title of the activity:** 2nd International Workshop on Variability, Adaptation, and Dynamism in Software Systems and Services (VADER)
   Type of activity: Taller   **Geographical area:** European Union
   Type of participation: Organiser
   Start-End date: 2011 - 2011

16 **Title of the activity:** 1st Workshop on Component and Service Interoperability
   Type of activity: Taller   **Geographical area:** Non EU International
   Type of participation: Organiser
   Start-End date: 2010 - 2010

17   **Title of the activity:** 3rd Workshop on Autonomic and SELF-adaptive Systems
     Type of activity: Taller   **Geographical area:** National
     Type of participation: Organiser
     Start-End date: 2010 - 2010

18   **Title of the activity:** Adaptation in Service Ecosystems and Architectures (AVYTAT)
     Type of activity: Taller
     Type of participation: Organiser
     Start-End date: 2010 - 2010

19   **Title of the activity:** 2nd Workshop on Autonomic and SELF-adaptive Systems (WASELF 2009)
     Type of activity: Taller   **Geographical area:** National
     Type of participation: Organiser
     Start-End date: 2009 - 2009

20   **Title of the activity:** 5th International Workshop on Formal Aspects of Component Software (FACS 2008)
     Type of activity: Taller   **Geographical area:** Non EU International
     Type of participation: Organiser
     Start-End date: 2008 - 2008

21   **Title of the activity:** Workshop on Autonomic and SELF-adaptive Systems (WASELF-* 2008)
     Type of activity: Taller
     Type of participation: Organiser
     Start-End date: 2008 - 2008

22   **Title of the activity:** 18th European Summer School in Logic Language and Information (ESSLLI 2006)
     Type of activity: Escuela de verano   **Geographical area:** European Union
     Convening entity: Association for Logic, Language and Information (FoLLI)
     Type of participation: Organiser
     Start-End date: 2006 - 2006

R&D management

Name of the activity: Comisión de Transferencia del Instituto de Tecnologías e Ingeniería del Software (ITIS)
Type of management: Management of body
Performed tasks: Responsable de paquete del plan de transferencia del instituto
Start date: 10/2021

Evaluation and revision of R&D projects and articles

1   **Performed tasks:** Evaluación de Proyectos para el Engineering and Physical Sciences Research Council (EPSRC)
     Entity where activity was carried out: EPSRC   **Type of entity:** State agency
     Type of activity: Evaluación de proyectos de investigación
     Geographical area: Non EU International
     Start-End date: 2021 - 2021

2   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: ACM Transactions on Autonomous and Adaptive Systems
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 11/2020 - 11/2020

3   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: Communications of the ACM
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 05/2020 - 05/2020

4   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: ACM Transactions on Autonomous and Adaptive Systems
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 07/2019 - 07/2019

5   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: ACM Transactions on Software Engineering and Methodology
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 03/2019 - 03/2019

6   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: Journal of Systems and Software
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 01/2019 - 01/2019

7   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: IEEE Software
Type of activity: Review of articles in scientific or technological journals
Start-End date: 11/2018 - 11/2018

8   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: IEEE Transactions on Software Engineering
Type of activity: Review of articles in scientific or technological journals
Start-End date: 09/2018 - 09/2018

9   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: IEEE Transactions on Dependable and Secure Computing
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 07/2018 - 07/2018

10   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: Journal of Systems and Software
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 06/2018 - 06/2018

11 **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: Science of Computer Programming
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 03/2018 - 03/2018

12 **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: Journal of Systems and Software
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 11/2017 - 11/2017

13 **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: ACM Transactions on Autonomous and Adaptive Systems
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 09/2017 - 09/2017

14 **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: Journal of Systems and Software
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 09/2017 - 09/2017

15 **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: IEEE Software
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 08/2017 - 08/2017

16 **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: Journal of Systems and Software
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 10/2016 - 10/2016

17 **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: Journal of Systems and Software
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 09/2016 - 09/2016

18 **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: Science of Computer Programming
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 03/2016 - 03/2016

19   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: User Modeling and User-Adapted Interaction
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 03/2016 - 03/2016

20   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: ACM Transactions on Autonomous and Adaptive Systems
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 01/2016 - 01/2016

21   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: Science of Computer Programming
Type of activity: Review of articles in scientific or technological journals
Geographical area: Non EU International
Start-End date: 06/2015 - 06/2015

22   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: Future Generation Computer Systems
Type of activity: Review of articles in scientific or technological journals
Start-End date: 02/2014 - 02/2014

23   **Performed tasks:** Revisión de Artículos
Entity where activity was carried out: IEEE Transactions on Software Engineering
Type of activity: Review of articles in scientific or technological journals
Start-End date: 10/2013 - 10/2013

24   **Performed tasks:** Evaluador de proyectos para el Icelandic Research Fund
Entity where activity was carried out: Icelandic Research Fund
City of entity: Reikiavik, Iceland
Type of activity: Participación en comité evaluado de proyectos
Geographical area: Non EU International
Start-End date: 2013 - 2013

Other achievements

Stays in public or private R&D centres

1   **Entity:** Imperial College
Faculty, institute or centre: Department of Computing
City of entity: Londres, United Kingdom
Start-End date: 07/2008 - 09/2008
Goals of the stay: Guest

2   **Entity:** University of California
Faculty, institute or centre: Donald Bren School of Computer Science
City of entity: Irvine, United States of America
Start-End date: 10/2007 - 01/2008

Goals of the stay: Guest

Obtained accreditations/recognitions

1 **Description:** Acreditación para el acceso al cuerpo de Catedráticos de Universidad
Accrediting entity: Agencia Nacional de Evaluación   **Type of entity:** Agencia Estatal
de la Calidad y Acreditación
Date of recognition: 20/05/2024

2 **Description:** Acreditación para el acceso al cuerpo de Profesores Titulares de Universidad
Accrediting entity: Agencia Nacional de Evaluación   **Type of entity:** Agencia Estatal
de la Calidad y Acreditación
Date of recognition: 29/01/2019

Summary of other achievements

1 **Description of the achievement:** Best Student Paper Award at the International Symposium on Software
Engineering for Adaptive and Self-Managing Systems (SEAMS 2024)
Conferral date: 2024

2 **Description of the achievement:** Editor Special Issue ACM Transactions on Autonomous and Adaptive
Systems: Best Papers SEAMS 2022
Conferral date: 2022

3 **Description of the achievement:** Best Student Paper Award at the International Symposium on Software
Engineering for Adaptive and Self-Managing Systems (SEAMS 2021)
Conferral date: 2021

4 **Description of the achievement:** Best Tool Demo Award at the International Conference on Software
Architecture (ECSA 2020)
Conferral date: 2020

5 **Description of the achievement:** Editor Special Issue IEEE Software Marzo/Abril 2019 "Building
Long-Lived Adaptive Systems"
Conferral date: 2019

6 **Description of the achievement:** Best Paper Award at the International Conference on Software
Architecture 2017
Conferral date: 2017

7 **Description of the achievement:** Editor Special Issue Science of Computer Programming - 2016
Conferral date: 2016

8 **Description of the achievement:** ACM SIGSOFT Distinguished Paper Award at the 2014 Conference on
the Quality of Software Architectures (QoSA 2014)
Accrediting entity: ACM SIGSOFT
Conferral date: 2014

GOBIERNO
DE ESPAÑA

MINISTERIO
DE CIENCIA, INNOVACIÓN
Y UNIVERSIDADES

FECYT
INNOVACIÓN