ECSA 2019

European Conference on Software Architecture
9-13 September 2019
Paris - France

13th European Conference on Software Architecture 2019 - Paris

Program & Information

https://ecsa2019.univ-lille.fr

Twitter: @ECSACONF

Sponsors & Partners

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CRIStAL
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GPL
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Wireless network

To be connected to the FIAP wireless network named WIFIAP:
Id: WIFIAP
Password: internet
You must create an account.

Rooms

Floor	Rooms
8th floor	Vienne
1st floor	Bonn Rome Restaurant Espace Jean Monnet
Ground floor	Welcome desk Hall Self-service
Basement	Esapce Paul Delouvrier Bruxelles Lisbonne Oslo Stockholm Budapest Copenhague Athènes

Coffee Break

The coffee breaks for ECSA will be served at Espace Jean Monnet (1st floor) on Monday or Espace Paul Delouvrier (Basement) on **Tuesday and Friday**.

On Wednesday and Thursday, ECSA will share coffee breaks with SPLC in the Hall (Ground floor) and Espace Paul Delouvrier (Basement).

Lunch

For ECSA, lunches will be served daily at the self-service, except on Thursday when the lunch will be served at the restaurant.

Event Information

Welcome reception

ECSA 2019 will serve a tasty cocktail to the attendees with a variety of appetizers and drinks. This cocktail will be held on the 11th of September at 18:30 in the hall of the FIAP building.

Paris City Tour & Gala Dinner

The Paris City Tour and The gala dinner will be held the 12th September. We will depart by bus at 17:30 from FIAP building to Paris City Tour where we will enjoy of a nice tour of the main monuments.

For the Gala Dinner, we will board on a riverboat for a Seine dinner cruise through Paris.

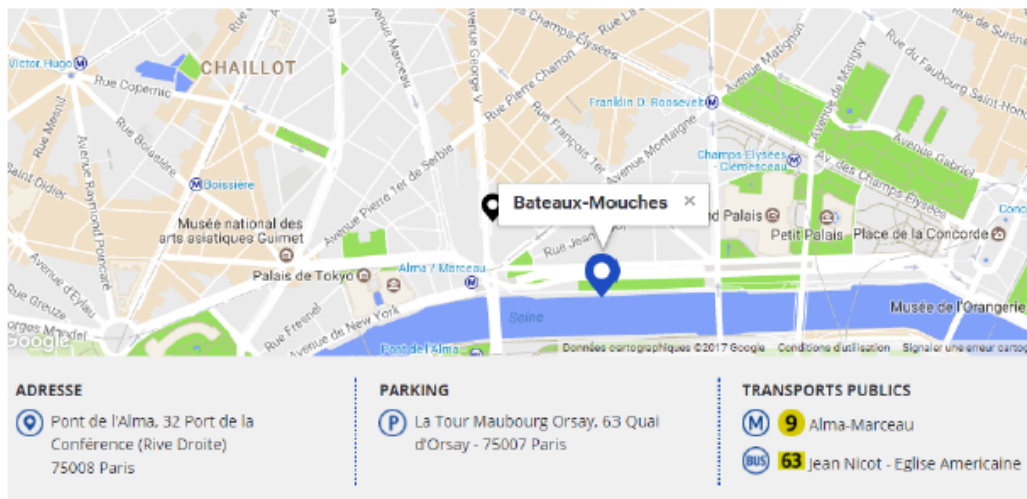The meeting point for the Gala Dinner is
Pont de l'Alma
32, Port de la conference (Rive Droite)
75008 Paris
Metro Line 9 – Alma-Marceau Station

The Paris City Tour buses will drop you at this address.

Program overview

	9th Monday	10th Tuesday	11th Wednesday		12th Thursday		13th Friday
8:15 - 9:00	Registration	Registration	Registration		Registration		Registration
9:00 - 10:30	SAEroCon, DeMeSSA	SAEroCon, SASI4, SAHVA, FAACS	Opening (9:00-9:30)		ECSA/SPLC Keynote: Lidia Fuentes Rooms Bruxelles & Lisbonne		ECSA Keynote: Awais Rashid Room Lisbonne
			ECSA/SPLC Keynote: Christian Kästner Rooms Bruxelles & Lisbonne		Demos & posters teasing		Coffee Break
10:30 - 11:00	Coffee Break	Coffee Break	Coffee Break		Coffee Break/Posters/Demos		ECSA CONFERENCE RS4 Quality Attributes Room Lisbonne
11:00 - 12:30	SAEroCon, DeMeSSA	SAEroCon, SASI4, SAHVA, FAACS	ECSA CONFERENCE RS1 Services & Micro-services Room Lisbonne	ECSA/SPLC DOCTORAL SYMPOSIUM Room Stockholm/Budapest	ECSA DEMOS & POSTERS Room Copenhague (Demos) & Hall (Posters)	ECSA INDUSTRIAL Track IS1 Room Lisbonne	
12:30 - 14:00	Lunch Self-service	Lunch Self-service	Lunch - Self-service		Lunch - Restaurant		Closing
							Lunch - Self-service
14:00 - 15:30	SAEroCon, SACBD, DeMeSSA	SAEroCon, SASI4, SAHVA, FAACS	ECSA CONFERENCE RS2 Software Architecture in Development Process Room Lisbonne	ECSA/SPLC DS Keynote: Carlo Ghezzi Room Stockholm/Budapest	ECSA/SPLC Women in Software Engineering track Room Oslo	ECSA Industrial Keynote: Rainer Grau Room Lisbonne	
				ECSA/SPLC DOCTORAL SYMPOSIUM		ECSA INDUSTRIAL Track IS2	
15:30 - 16:00	Coffee Break	Coffee Break	Coffee Break		Coffee Break/Posters		
16:00 - 17:30	SAEroCon, SACBD, DeMeSSA	SAEroCon, SASI4, SAHVA, FAACS	ECSA CONFERENCE RS3 Adaptation and Design Space Exploration Room Lisbonne	ECSA/SPLC DOCTORAL SYMPOSIUM Room Stockholm/Budapest	ECSA/SPLC Women in Software Engineering Panel Room Oslo		
					Buses leave FIAP at 17:30		
17:30 - 23:00			18:30-19:30 WELCOME RECEPTION FIAP		17:30 - 23:00 CITY TOUR + GALA DINNER		

Workshop program

8:15-9:00	9th Monday			10th Tuesday			
	Registration			Registration			
	Room Stockholm (20)	Room Copenhague (20)	Room Vienne (20)	Room Bonn (14)	Room Rome (16)	Room Athènes (20)	Room Copenhague (20)
9:00-10:30		SAEroCon	DeMeSSA	SASI4	SAHVA	FAACS	SAEroCon
10:30-11:00	Coffee Break - Espace Jean Monnet			Coffee Break - Espace Paul Delouvrier			
11:00-12:30		SAEroCon	DeMeSSA	SASI4	SAHVA	FAACS	SAEroCon
12:30-14:00	Lunch - Self-service						
14:00-15:30	SACBD	SAEroCon	DeMeSSA	SASI4	SAHVA	FAACS	SAEroCon
15:30-16:00	Coffee Break - Espace Jean Monnet			Coffee Break - Espace Paul Delouvrier			
16:00-18:00	SACBD	SAEroCon	DeMeSSA	SASI4	SAHVA	FAACS	SAEroCon

9th Monday

Software Architecture Erosion and Architectural Consistency (SAEroCon)

International Workshop on Software Architecture Challenges in Big Data (SACBD)

Designing and Measuring CyberSecurity in Software Architectures (DeMeSSA)

10th Tuesday

Systems, Architectures, and Solutions for Industry 4.0 (SASI4)

International Workshop on Software Architectures and Human Values (SAHVA)

Formal Approaches for Advanced Computing Systems (FAACS)

Conference Program

	11th Wednesday	
8:15-9:00	**Registration**	
9:00-9:30	**Opening ECSA/SPLC - Room Bruxelles & Lisbonne** **General Chairs: Laurence Duchien, Camille Sallinesi, Tewfik Ziadi & Program Committee Chairs: Tomas Bures, Paola Inverardi, Thomas Thüm**	
9:30-10:30	*Performance Analysis for Highly-Configurable Systems* *KeyNote Session K1: Christian Kästner* *Chair: Klaus Schmid - Rooms Bruxelles & Lisbonne*	
10:30-11:00	**Coffee Break - Hall & Espace Paul Delouvrier**	
	MAIN CONFERENCE SESSION RS1: Services & Micro-services **Chair: Matthias Galster - Room Lisbonne**	**ECSA/SPLC Doctoral Symposium - DS1** **Chair: Oscar Diaz - Room Stockholm/Budapest**
11:00-11:30	- Amine El Malki and Uwe Zdun Guiding Architectural Decision Making onService Mesh Based Microservice Architectures	- Nicolas Hlad Facilitating the Development of Software Product Lines in Small and Medium-Sized Enterprises - Angel Cañete
11:30-12:00	- Evangelos Ntentos, Uwe Zdun, Konstantinos Plakidas, Daniel Schall, Fei Li and Sebastian Meixner Supporting Architectural Decision Making on Data Management in Microservice Architectures	Energy Efficient Assignment and Deployment of Tasks in Structurally Variable Infrastructures - Sebastian Krieter Enabling Efficient Automated Configuration Generation and Management
12:00-12:30	- Luís Nunes, Nuno Santos and António Rito Silva From a Monolith to a Microservices Architecture: An Approach Based on Transactional Contexts	- Tala Najem Formal Semantics For Supporting The Automated Synthesis Of Choreography-based Architectures
12:30-14:00	**Lunch - Self-service**	
14:00-14:30	**MAIN CONFERENCE SESSION RS2: Software Architecture in Development Process** **Chair: Henry Muccini - Room Lisbonne**	**ECSA/SPLC Doctoral Symposium DS2** **Chair: Raffaela Mirandola - Room Stockholm/Budapest**
	- Ken Power and Rebecca Wirfs-Brock An Exploratory Study of Naturalistic Decision Making in Complex Software Architecture Environments	*Becoming and being a researcher--what I wish someone would have told me when I started doing research* *KeyNote Session K2: Carlo Ghezzi*
14:30-15:00	- Hasan Sozer Evaluating the Effectiveness of Multi-level Greedy Modularity Clustering for Software Architecture Recovery	
15:00-15:15	- Matthias Galster, Fabian Gilson and Francois Georis What Quality Attributes Can we Find in Product Backlogs? A Machine Learning Perspective	-Mercy Njima Architecting for Scale: The Case for Systematic Software Reuse in Managing Technical Debt in Start-ups
15:15-15:30	- Ivan Lujic and Hong-Linh Truong Architecturing Elastic Edge Storage Services for Data-Driven Decision Making	
15:30-16:00	**Coffee Break Hall & Espace Paul Delouvrier**	
16:00-16:30	**MAIN CONFERENCE SESSION RS3: Adaptation and Design Space Exploration** **Chair: Patrizio Pelliccione - Room Lisbonne**	**ECSA/SPLC Doctoral Symposium DS3** **Chair: Marianne Huchard - Room Stockholm/Budapest**
	- Angelika Musil, Juergen Musil, Danny Weyns and Stefan Biffl Continuous Adaptation Management in Collective Intelligence Systems	- Ilaria Pigazzini Automatic Detection of Architecture Erosion through Semantic Representation of code, - Yuwei Wang
16:30-17:00	- Tobias Wägemann, Ramin Tavakoli Kolagari and Klaus Schmid ADOOPLA - Combining Product-Line and Product-Level Criteria in Multi-Objective Optimization of Product Line Architectures	Towards Service Discovery and Autonomic Version Management in Self-healing Microservices Architecture - Ana Paula Allian Promoting Trust in Interoperability of Systems-of-Systems
17:00-17:30	- Michael Mayrhofer, Christoph Mayr-Dorn, Alois Zoitl, Georg Weichhart, Ouijdane Guiza and Alexander Egyed Assessing Adaptability of Software Architectures for Cyber Physical Production Systems	- Chawanangwa Lupafya A Framework for Managing Uncertainty in Software Architecture
17:30-18:30		
18:30-19:30	**WELCOME RECEPTION at FIAP**	

	12th Thursday: Industry, Tools & Women
8:15-9:00	**Registration**
9:00-10:00	*Variability variations in Cyber-Physical systems* *KeyNote Session K3: Lidia Fuentes* *Chair: Paola Inverardi* *Rooms Bruxelles & Lisbonne*
10:00-10:30	ECSA & SPLC Demos, Tools, Posters Teasing - Chairs Danny Weyns & Rick Rabiser
10:30-11:00	Coffee Break - Poster Exhibition in Hall - Demos in Room Copenhague

	MAIN CONFERENCE INDUSTRY SESSION IS1 **Chair: Javier Camara** **Room Lisbonne**	**ECSA Demos & Posters Session T1** **Chairs: Danny Weyns & Elena Navarro** **Room Copenhague (Demos) & Hall (Posters)**
11:00-11:30	- Somayeh Malakuti, Johannes Schmitt, Marie Platenius-Mohr, Sten Grüner, Ralf Gitzel, and Prerna Bihani A Four-Layer Architecture Pattern for Constructing and Managing Digital Twins	**Demos -> Copenhague** - An Exploration and Experiment Tool Suite for Code to Architecture Mapping Techniques, Tobias Olsson, Morgan Ericsson and Anna Wingkvist - ArchLearner: Leveraging Machine-learning Techniques for Proactive Architectural Adaptation, Henry Muccini and Karthik Vaidhyanathan - Kubow: An Architecture-Based Self-Adaptation Service for Cloud Native Applications, Carlos Mendes Aderaldo, Nabor Mendonca, Bradley Schmerl and David Garlan - Software Architecture Knowledge Sharing with the Architecture Knowledge Base (AKB), Klaus Brandner, Benjamin Mayer and Rainer Weinreich
11:30-12:00	- Ilaria Pigazzini, Francesca Arcelli Fontana and Andrea Maggioni Tool support for the migration to microservice architecture: an industrial case study	**Posters -> Hall** - A Bottom-Up Approach for Reconstructing Software Architecture Product Lines, Mohamed Lamine Kerdoudi, Tewfik Ziadi, Chouki Tibermacine and Salah Sadou - A Recommender System for Software Architecture Decision Making, Klaus Brandner and Rainer Weinreich - Discovering Architectural Rules in Practice, Sandra Schröder and Georg Buchgeher - Self-accounting in architecture-based self-adaptation, Raffaela Mirandola, Elvinia Riccobene and Patrizia Scandurra
12:00-12:30	- David Issa Mattos, Jan Bosch, and Helena Holmström Olsson ACE: Easy Deployment of Field Optimization Experiments	- The Applicability of Palladio for Assessing the Quality of Cloud-based Microservice Architectures, Floriment Klinaku, Dominik Bilgery and Steffen Becker - Towards a Parallel Template Catalogue for Software Performance Predictions, Markus Frank, Floriment Klinaku, Marcus Hilbrich and Steffen Becker - Towards a Framework for Developing Internet of Things Applications: An Edge Computing Approach, Aurora Macías
12:30-14:00	Lunch - Restaurant	

	MAIN CONFERENCE INDUSTRY SESSION IS2 **Chair: Javier Camara - Room Lisbonne**	**Women in Software Engineering Track WS1** **Chairs: Anne Koziolek & Patrizia Scandurra - Room Oslo**
14:00- 15:00	*Good practices to identify bounded context to build agile organizations in sync with a smart system architecture- Classical methods still deliver value in agile ecosystems* *KeyNote Session K4: Grau Rainer* *Chair Javier Camara*	- Ricardo Colomo-Palacios, and Cristina Casado-Lumbreras National Cultures and Gender Balance in ICT: A preliminary study
		- Moreno Marzolla and Raffaela Mirandola Gender Balance in Computer Science and Engineering in Italian Universities
		- Barbora Buhnova, Lucie Jurystova, and Dita Prikrylova Assisting Women in Career Change Towards Software Engineering: Experience from Czechitas NGO
15:00-15:30	- Julien Baclet Digital continuity for MBSE - MOISE project	- Christian Schindler and Matthias Müller Gender Gap? A Snapshot of a Bachelor Computer Science Course at Graz University of Technology
	CLOSING INDUSTRY TRACK	- Vandana Singh Women Participation in Open Source Software Communities
15:30-16:00	Coffee Break - Poster Exhibition in Hall	

	ECSA/SPLC Women in Software Engineering Panel - P1 **Chairs: Thorsten Berger, Anne Koziolek & Patrizia Scandurra - Room Oslo**
16:00-17:00	- Serge Abiteboul, Senior researcher, Inria, ENS Paris - Elisabeth Köhler, Senior researcher, director of the CNRS Mission for Women - Chiara Condi, Activist for women's empowerment and the founder of Led By HER - Florence Sedes, Professor, University of Toulouse
17:00-17:30	**Buses leave FIAP at 17:30**
17:30-23:00	**City tour + Gala Dinner**

	13th Friday
8:00-9:00	**Registration**
9:00-10:00	***Secure software architectures for a hyperconnected world: Game changer or pipe dream?*** ***KeyNote Session K5: Prof. Awais Rashid*** ***Chair: Tomas Bures - Room Lisbonne***
10:00-10:30	Coffee Break - Espace Paul Delouvrier
	MAIN CONFERENCE SESSION RS4 : Quality Attributes **Chair: Flavio Oquendo - Room Lisbonne**
10:30-11:00	- Rajitha Yasaweerasinghelage, Mark Staples, Hye-Young Paik and Ingo Weber Optimising architectures for performance, cost, and security
11:00-11:30	- Martina De Sanctis, Romina Spalazzese and Catia Trubiani QoS-based Formation of Software Architectures in the Internet of Things
11:30-12:00	- Cristian Camilo Castellanos Rodriguez, Boris Rainiero Perez Gutierrez, Carlos A. Varela, Maria Del Pilar Villamil and Dario Correal A Survey on Big Data Analytics Solutions Deployment
12:00-12:15	- Axel Busch, Dominik Fuchß, Maximilian Eckert and Anne Koziolek Assessing the Quality Impact of Features in Component-based Software Architectures
12:15-12:30	- Michael Striewe Components and Design Alternatives in E-Assessment Systems
12:30-12:45	Closing session
12:45-14:00	Lunch - Self-service