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Software Architecture

11th European Conference, ECSA 2017
Canterbury, UK, September 11–15, 2017
Proceedings

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Preface

This volume contains the proceedings of the 11th European Conference on Software Architecture (ECSA 2017), held during September 11–15, 2017, at the University of Kent at Canterbury, UK.

The goal of the European Conference on Software Architecture is to provide researchers, practitioners, and educators with a platform to present and discuss the most recent, innovative, and significant findings and experiences in the field of software architecture research and practice. ECSA 2017 has continued the tradition of attracting a varied type of submissions ranging from fundamental research to applied work in industrial context, focused on different types of systems and challenges raised by new developments.

The technical program included a main research track of accepted papers, keynote talks, a doctoral symposium track, a poster track, and a tool demonstration track. In addition, we also offered several workshops on diverse topics related to the software architecture discipline.

These proceedings contain nine regular and six short papers. They were selected by the Program Committee (PC) among 54 submissions. Each submission was assigned to at least three PC members for reviewing and was discussed afterwards during a 10-day electronic meeting. We sincerely thank the PC members and the 25 external reviewers for their work in preparing the 164 reviews and the effort taking in discussing the submissions.

The selected papers constitute a very interesting program and address topics including software architecture analysis and verification, software architecture evolution, architectural decisions, and software architecture practice. In addition to the selected papers, we were quite fortunate to have two excellent invited talks: Paola Inverardi of the University of Aquila, Italy on "Software Architectures: How Components Can Go Politely Social," and Peter Eeles from IBM on "How to Architect Anything."

We are grateful to the University of Kent for hosting ECSA 2017, the Organizing Committee for their excellent job, and the ECSA Steering Committee for their guidance. We thank also the providers of EasyChair Conference Management System that was a great help in organizing the submission and reviewing process and in the preparation of the proceedings. We would also like to acknowledge the prompt and professional support from Springer, who published these proceedings in printed and electronic volumes as part of the *Lecture Notes in Computer Science* series.

Finally, we would like to thank the authors of all the ECSA 2017 submissions and the attendees of the conference for their participation and we look forward to seeing you in Madrid for ECSA 2018.

September 2017

Antónia Lopes
Rogério de Lemos

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Software Architectures:
How Components Can Go Politely Social
(Invited Talk)

Paola Inverardi

Università dell'Aquila, L'Aquila, Italy

Software architectures (SA) serve many purposes. One of the most interesting characteristics of SA is their glue/connectivity nature that allows subsystems/components to interact, correctly. I will discuss this behavioral facet of SA in a historical perspective by also crossing the software engineering boundaries. Recent approaches in which SAs are instrumental to synthesize correct systems in an open world setting characterized by partial knowledge of the final system components provide a fresher interpretation of their role in the design of future software systems.

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