Preface

Static Analysis is recognized as a fundamental tool for program verification, bug detection, compiler optimization, program understanding, and software maintenance. The series of Static Analysis Symposia has served as the primary venue for the presentation of theoretical, practical, and applicational advances in the area. Previous symposia were held in Edinburgh, Saint-Malo, Munich, Seattle, Deauville, Venice, Perpignan, Los Angeles, Valencia, Kongens Lyngby, Seoul, London, Verona, San Diego, Madrid, Paris, Santa Barbara, Pisa, Aachen, Glasgow, and Namur. This volume contains the papers presented at SAS 2017, the 24th International Static Analysis Symposium. The conference was held on August 30th - September 1st, 2017 at New York University, New York City, NY, USA.

The conference received 64 initial abstracts that materialized into 50 full submissions, each of which was reviewed by at least three Program Committee members. The Program Committee accepted 22 papers, which appear in this volume. As in previous years, authors of SAS submissions had the chance to submit a virtual machine image with artifacts presented in the paper. In accordance with this, 16 submissions came with an artifact. Artifacts were used as an additional source of information during the evaluation of the submissions.

The Program Committee also invited three outstanding researchers to present invited talks: Alex Aiken (Stanford University, USA), Francesco Logozzo (Facebook, Seattle, USA), Peter Müller (ETH Zurich, Switzerland). Additionally, the program included two invited tutorials given by leading researchers: Josh Berdine (Facebook, London, UK), Roberto Giacobazzi (IMDEA, Spain and University of Verona, Italy). We warmly thank them for accepting the invitations.

SAS 2017 featured three associated workshops: 7th Workshop on Numerical and Symbolic Abstract Domains (NSAD 2017), 8th Workshop on Static Analysis and Systems Biology (SASB 2017), 8th Workshop on Tools for Automatic Program Analysis (TAPAS 2017) were held before SAS, on August 29th, 2017.

Many people and institutions contributed to the success of SAS 2017. We would like to thank the members of the Program Committee, who worked hard at carefully reviewing papers, holding insightful discussions during the on-line Program Committee meeting, and making final selections of accepted papers and invited speakers. We would also like to thank the additional referees enlisted by Program Committee members. The work of the Program Committee and the editorial process were greatly facilitated by the EasyChair conference management system. We are grateful to Springer for publishing these proceedings. A warm thank goes to Patrick Cousot for leading the local organization of the conference at New York University. Finally, we would like to thank our sponsors: Amazon, Courant Institute of Mathematical Sciences of New York University, Dipartimento di Matematica "Tullio Levi-Civita" of University of Padova, Facebook, and Springer.

July 2017 Francesco Ranzato
Padova

Table of Contents

Program Committee

Elvira Albert	Complutense University of Madrid
Jade Alglave	University College London
Josh Berdine	Facebook
Aleksandar Chakarov	University of Colorado, Boulder, CO
Liqian Chen	National University of Defense Technology
Maria Christakis	University of Kent
Pierre Ganty	IMDEA Software Institute
Alberto Griggio	FBK-IRST
Arie Gurfinkel	University of Waterloo
Thomas Jensen	INRIA
Laura Kovacs	Vienna University of Technology
Ana Milanova	Rensselaer Polytechnic Institute
Anders Moller	Aarhus University
Kedar Namjoshi	Bell Labs
Andreas Podelski	University of Freiburg
Francesco Ranzato	Dipartimento di Matematica, University of Padova, Italy
Xavier Rival	INRIA / ENS Paris
Ilya Sergey	University College London
Fausto Spoto	Dipartimento di Informatica, Verona
Harald Søndergaard	The University of Melbourne
Caterina Urban	ETH Zürich
David Van Horn	University of Maryland
Arnaud J. Venet	Google, Inc.
Eran Yahav	Technion

Additional Reviewers

B
Besson, Frederic
C
Correas Fernández, Jesús
D
Dietsch, Daniel
Dohrau, Jérôme
F
Fedyukovich, Grigory
Ferrara, Pietro
Frehse, Goran
G
Gange, Graeme
Gleiss, Bernhard
Gordillo, Pablo
Greitschus, Marius
I
Irfan, Ahmed
J
Jaroschek, Maximilian
K
Kafle, Bishoksan
Karpenkov, Egor
Khalimov, Ayrat
Krishna, Siddharth
L
Li, Huisong
M
Martin-Martin, Enrique
N
Navas, Jorge A
P
Popeea, Corneliu
R
Rebola Pardo, Adrian
Robillard, Simon
Román-Díez, Guillermo
S
Sankaranarayanan, Sriram
Schachte, Peter
Schilling, Christian
Schrammel, Peter

Steinhöfel, Dominic