

FORTE/FMOODS 2013

Florence, Italy

—Program—

Monday, June 3

Keynote

Mon, Jun 3, 09:30 – 10:30, Chairs: Dirk Beyer and Michele Boreale

Analyzing Interactions of Asynchronously Communicating Software Components (Invited Paper)

Tevfik Bultan (UC Santa Barbara, USA)

Coffee Break

Mon, Jun 3, 10:30 – 11:00

Verification

Mon, Jun 3, 11:00 – 12:30, Chair: Domagoj Babic

Formal Analysis of a Distributed Algorithm for Tracking Progress

Martin Abadi, Frank McSherry, Derek Murray, and Thomas Rodeheffer (Microsoft Research, USA)

A Case Study in Formal Verification using Multiple Explicit Heaps

Wojciech Mostowski (University of Twente, Netherlands)

Parameterized Verification of Track Topology Aggregation Protocols

Sergio Feo-Arenis and Bernd Westphal (University of Freiburg, Germany)

Lunch

Mon, Jun 3, 12:30 – 14:30

Types

Mon, Jun 3, 14:30 – 16:00, Chair: Martin Abadi

Monitoring Networks through Multiparty Session Types

Laura Bocchi, Tzu-Chun Chen, Romain Demangeon, Kohei Honda, and Nobuko Yoshida (Queen Mary, University of London, UK; University of Leicester, UK; Imperial College London, UK)

Semantic Subtyping for Objects and Classes

Ornela Dardha, Daniele Gorla, and Daniele Varacca (University of Bologna, Italy; University of Rome La Sapienza, Italy; University Paris Diderot, France)

Polymorphic Types for Leak Detection in a Session-Oriented Functional Language

Viviana Bono, Luca Padovani, and Andrea Tosatto (Università di Torino, Italy)

Coffee Break

Mon, Jun 3, 16:00 – 16:30

Testing

Mon, Jun 3, 16:30 – 17:30, Chair: Wojciech Mostowski

Passive Testing with Asynchronous Communications

Rob Hierons, Mercedes Merayo, and Manuel Nuñez (Brunel University, UK; Universidad Complutense de Madrid, Spain; UCM, Spain)

Input-Output Conformance Simulation (iocos) for Model Based Testing

Luis Llana, Rafael Martínez-Torres, and Carlos Gregorio-Rodríguez (Universidad Complutense de Madrid, Spain)

Tuesday, June 4

Coffee Break

Tue, Jun 4, 10:30 – 11:00

DisCoTec Joint Session

Tue, Jun 4, 11:00 – 12:30

Model Checking Distributed Systems against Temporal-Epistemic Specifications

Andreas Griesmayer and Alessio Lomuscio (Imperial College London, UK)

Lunch

Tue, Jun 4, 12:30 – 14:30

Model Checking

Tue, Jun 4, 14:30 – 16:00, Chair: Tevfik Bultan

Formal Verification of Distributed Branching Multiway Synchronization Protocols

Hugues Evrard and Frederic Lang (Inria, France; INRIA Rhône-Alpes, France)

An Abstract Framework for Deadlock Prevention in BIP

Paul Attie, Saddek Bensalem, Marius Bozga, Mohamad Jaber, Joseph Sifakis, and Fadi Zaret (American University of Beirut, Lebanon; VERIMAG, France; American University of Beirut, Lebanon)

Bounded Model Checking of Graph Transformation Systems via SMT Solving

Tobias Isenberg, Dominik Steenzen, and Heike Wehrheim (University of Paderborn, Germany)

Coffee Break

Tue, Jun 4, 16:00 – 16:30

Social Event and Dinner
Tue, Jun 4, 16:30 – 22:00

Wednesday, June 5

Coffee Break
Wed, Jun 5, 10:30 – 11:00

Automata
Wed, Jun 5, 11:00 – 12:30, Chair: Hanne Riis Nielson

Verification of Directed Acyclic Ad Hoc Networks

Parosh Aziz Abdulla, Mohamed Faouzi Atig, and Othmane Rezine (Uppsala University, Sweden)

Transducer-Based Algorithmic Verification of Retransmission Protocols over Noisy Channels

Jay Thakkar, Aditya Kanade, and Rajeev Alur (Indian Institute of Science, India; University of Pennsylvania, USA)

Asynchronously Communicating Visibly Pushdown Systems

Domagoj Babic and Zvonimir Rakamaric (Facebook, USA; School of Computing, University of Utah, USA)

Lunch
Wed, Jun 5, 12:30 – 14:30

Distribution and Concurrency
Wed, Jun 5, 14:30 – 16:00, Chair: Nobuko Yoshida

A Timed Component Algebra for Services

Benoit Delahaye, José Luiz Fiadeiro, Axel Legay, and Antónia Lopes (INRIA/IRISA, France; Royal Holloway, University of London, UK; University of Lisbon, Portugal)

Probabilistic Analysis of the Quality Calculus

Hanne Riis Nielson and Flemming Nielson (Technical University of Denmark, Denmark)

May-Happen-in-Parallel Based Deadlock Analysis for Concurrent Objects

Antonio E. Flores-Montoya, Elvira Albert, and Samir Genaim (Technische Universität Darmstadt, Germany; Complutense University of Madrid, Spain)

Coffee Break
Wed, Jun 5, 16:00 – 16:30

Security

Wed, Jun 5, 16:30 – 17:30, Chair: Emilio Tuosto

Lintent: Towards Security Type-Checking of Android Applications

Michele Bugliesi, Stefano Calzavara, and Alvisè Spanò (Università Ca Foscari Venezia, Italy; Ca Foscari University of Venice, Italy)

Honesty by Typing

Massimo Bartoletti, Alceste Scalas, Emilio Tuosto, and Roberto Zunino (Universita' degli Studi di Cagliari, Italy; University of Cagliari, Italy; University of Leicester, UK; Università degli Studi di Trento, Italy)