

29th Nordic Workshop on Programming Theory (NWPT'17)

1-3.11.2017
Turku, Finland

Programme

Wednesday 1.11.

- 9:30 – 10:20 **Registration (+ coffee)**
- 10:20 – 10:30 Opening words (Chair Marina Waldén)
- 10:30 – 11:30 **Invited speaker:** Marjan Sirjani
Event-based Analysis of Distributed Timed Actors
- 11:30 – 12:30 **Session 1: Multilevel modelling**
Juan Boubeta-Puig, Fernando Macías and Adrian Rutle
Towards an Autonomous Robot Architecture Combining Complex Event Processing and Multilevel Modelling
- Fernando Macías, Adrian Rutle and Volker Stolz
Coordination and Amalgamation of Multilevel Coupled Model Transformations
- 12:30 – 13:30 **Lunch**
- 13:30 – 15:00 **Session 2: Parallel and Concurrent Programming**
Shukun Tokas, Olaf Owe and Christian Johansen
Code Diversification Mechanisms for Securing the Internet of Things
- Cosimo Laneve, Michael Lienhardt, Ka I Pun and Guillermo Román-Díez
Time analysis of actor programs
- Junia Gonçalves
Effects in deterministic parallel programs
- 15:00 – 15:30 **Coffee break**
- 15:30 – 17:00 **Session 3: Distributed and Object Systems**
Toktam Ramezanifarkhani, Elahe Fazeldelhkordi and Olaf Owe
A Language-Based Approach to Prevent DDoS Attacks in Distributed Object Systems
- Rui Wang, Lars Kristensen, Hein Meling and Volker Stolz
Model-based Testing of the Gorums Framework for Fault-tolerant Distributed Systems
- Toktam Ramezanifarkhani, Farzane Karami and Olaf Owe
A High-Level Language for Active Objects with Future-Free Support of Futures
- 17:30 – 19:00 **Welcome Reception** (Linnateatteri)
– by Turku city

Thursday 2.11.

- 9:00 – 10:00 **Invited speaker:** Marieke Huisman
Verification of Concurrent Software with VerCors
- 10:00 – 10:30 **Coffee break**
- 10:30 – 11:30 **Session 4: Petri nets**
Frederik M. Bønneland, Jakob Dyhr, Mads Johannsen and Jiří Srba
Stubborn Versus Structural Reductions for Petri Nets
- Anastasia Gkolfi, Einar Broch Johnsen, Lars Michael Kristensen and Ingrid Chieh Yu
Resource Management of Cloud-Aware Programs using Coloured Petri Nets
- 11:30 – 12:30 **Session 5: Synthesizing**
Michael R. Hansen
On-the-fly solving of railway games
- Isabella Kaufmann, Jiri Srba, Kim G. Larsen, Lasse S. Jensen and Søren M. Nielsen
Symbolic Synthesis for Non-Negative Multi-Weighted Games
- 12:30 – 13:30 **Lunch**
- 13:30 – 15:00 **Session 6: Testing and Analysing**
Raluca Marinescu, Predrag Filipovikj, Eduard Paul Enoiu, Jonatan Larsson and Cristina Seceleanu
An Energy-aware Mutation Testing Framework for EAST-ADL Architectural Models
- Wojciech Mostowski
Consequence Testing for Automotive Software through Mocking
- Larissa Braz, Rohit Gheyi, Volker Stolz and Márcio Ribeiro
Analyzing Changes on Configurable Systems with #ifdefs
- 15:00 15:30 **Coffee break**
- 15:30 – 17:00 **Session 7: Models**
Daniel Schnetzer Fava, Martin Steffen, Volker Stolz and Stian Valle
Operational Semantics of a Weak Memory Model inspired by Go
- Fazle Rabbi and Yngve Lamo
A diagrammatic approach for bracing heterogeneous models
- Mahsa Varshosaz, Mohammadreza Mousavi, Lars Luthmann and Malte Lochau
Expressive Power and Encoding of Transition System Models for Software Product Lines
- 19:00 – **Workshop dinner** (Hus Lindman)

Friday 3.11.

- 9:30 – 10:30 **Invited speaker:** John Hughes
Testing the Hard Stuff and Staying Sane
- 10:30 – 11:00 **Coffee break**
- 11:00 – 11:30 **Session 8: Refinement algebra**
Kim Solin
Abstract refinement algebra: a survey
- 11:30 – 12:30 **Session 9: Languages**
Alejandro Rodríguez, Fernando Macías, Lars M. Kristensen and Adrian Rutle
Towards Domain-Specific CPN Modelling Languages
- Robin Kaarsgaard and Michael Kirkedal Thomsen
RFun Revisited
- Closing words (Chair Marina Waldén)
- 12:30 - **Lunch**
PC-meeting