



Program

August 17, 2015	
18:00–20:00	Welcome reception
August 18, 2015	
8:00–08:45	Registration
8:45–09:00	Opening
09:00–10:00	Invited talk: Andreas Maletti (chair F. Drewes) <i>Finite-State Technology in Natural Language Processing</i>
10:00–10:30	Coffee break
— <i>Computing Properties of Automata 1</i> (chair H. Björklund) —	
10:30–11:00	Marek Szykuła <i>Checking Whether an Automaton is Monotonic is NP-Complete</i>
11:00–11:30	Grzegorz Madejski <i>The Complexity of the Membership Problem for Linear and Regular Permutation Languages</i>
11:30–12:00	Natalia Kushik and Nina Yevtushenko <i>Describing Homing and Distinguishing Sequences for Nondeterministic Finite State Machines via Synchronizing Automata</i>
12:00–13:30	Lunch break
— <i>Transformation of Automata</i> (chair A. Maletti) —	
13:30–14:00	Mehryar Mohri and Michael Riley <i>On the Disambiguation of Weighted Automata</i>
14:00–14:30	Mans Hulden <i>From Two-Way to One-Way Finite Automata</i>
14:30–15:00	Abhijin Adiga, Chris Kuhlman, Madhav Marathe, S. S. Ravi, Daniel J. Rosenkrantz and Richard E. Stearns <i>Complexity of Inferring Local Transition Functions of Discrete Dynamical Systems</i>
15:00–15:30	Coffee break
— <i>Parsing and Matching</i> (chair B. Watson) —	
15:30–16:00	Brink Van Der Merwe and Martin Berglund <i>On the Semantics of Regular Expression Parsing In the Wild</i>
16:00–16:30	Angelo Borsotti, Luca Breveglieri, Stefano Crespi Reghizzi and Angelo Morzenti <i>From Ambiguous Regular Expressions to Deterministic Parsing Automata</i>
16:30–17:00	Emanuele Giaquinta <i>Run-Length Encoded Nondeterministic KMP and Suffix Automata</i>

August 19, 2015	
8:00–09:00	Registration
09:00–10:00	Invited talk: Benedikt Bollig (chair C. Löding) <i>Five Models of Automata and Logics for Concurrent Systems</i>
10:00–10:30	Coffee break
10:30–11:00	CIAA general meeting
11:00–17:30	Excursion to Norrbyuskär w/ lunch
19:00–	Conference dinner

August 20, 2015	
8:00–09:00	Registration
09:00–10:00	Invited talk: Christof Löding (chair B. Bollig) <i>Resource Automatic Structures for Verification of Boundedness Properties</i>
10:00–10:30	Coffee break
— <i>Computing Properties of Automata 2</i> (chair M. Holzer) —	
10:30–11:00	Zhe Dang, Dmitry Dementyev, Thomas R. Fischer and William Hutton <i>Security of Numerical Sensors in Automata</i>
11:00–11:30	Daniel Prusa <i>Decidability of the Emptiness Problem for Multi-Dimensional Context-free Grammars</i>
11:30–12:00	Sabine Broda, Sílvia Cavadas, Miguel Ferreira and Nelma Moreira <i>Deciding Synchronous Kleene Algebra with Derivatives</i>
12:00–13:30	Lunch break
— <i>Expressive Power</i> (chair Y.-S. Han) —	
13:30–14:00	Henning Fernau, Meenakshi Paramasivan and Markus L. Schmid <i>Jumping Finite Automata: Characterizations and Complexity</i>
14:00–14:30	Martin Kutrib and Matthias Wendlandt <i>Expressive Capacity of Concatenation Freeness</i>
14:30–15:00	Masaki Nakanishi and Abuzer Yakaryilmaz <i>Classical and Quantum Counter Automata on Promise Problems</i>
15:00–15:30	Coffee break
— <i>Foundations</i> (chair K. Salomaa) —	
15:30–16:00	Pascal Caron, Ludovic Mignot and Clément Miklarz <i>On the hierarchy of block deterministic languages</i>
16:00–16:30	Vladimir Gusev and Marek Szykuła <i>On the Number of Synchronizing Colorings of Digraphs</i>
16:30–17:00	Stefan Hoffmann and Ludwig Staiger <i>Subword Metrics for Infinite Words</i>

August 21, 2015	
8:00–09:00	Registration
09:00–10:00	Invited talk: Bruce W. Watson (chair J. Björklund) <i>Hardware Implementations of Finite Automata and Regular Expressions</i>
10:00–10:30	Coffee break
— <i>Descriptive Complexity</i> (chair B. v. d. Merwe) —	
10:30–11:00	Timothy Ng, David Rappaport and Kai Salomaa <i>State Complexity of Prefix Distance</i>
11:00–11:30	Hermann Gruber, Markus Holzer and Sebastian Jakobi <i>More on Deterministic and Nondeterministic Finite Cover Automata</i>
— <i>Tool Demonstrations</i> (chair B. v. d. Merwe) —	
11:30–11:50	Abejide Ade-Ibijola, Sigrid Ewert and Ian Sanders <i>Introducing Code Adviser: a DFA-driven Electronic Programming Tutor</i>
11:50–12:10	Angelo Borsotti, Luca Breveglieri, Stefano Crespi Reghizzi and Angelo Morzenti <i>BSP: a Parsing Tool for Ambiguous Regular Expressions</i>
12:10–13:30	Lunch break
— <i>Random Generation of Automata</i> (chair F. Drewes) —	
13:30–14:00	Pierre-Cyrille Heam and Jean-Luc Joly <i>Random Generation and Enumeration of Accessible Deterministic Real-time Push-down Automata</i>
14:00–14:30	Pierre-Cyrille Heam and Jean-Luc Joly <i>On the Uniform Random Generation of Non deterministic Automata up to Isomorphism</i>
14:30	Closing
14:45–15:15	Farewell coffee
<i>End of CIAA 2015</i>	