The following full text is a publisher's version.

For additional information about this publication click this link.
http://hdl.handle.net/2066/168753

Please be advised that this information was generated on 2017-09-02 and may be subject to change.
International Conference on Grammatical Inference 2016:
Preface

Sicco Verwer
Faculty of Electrical Engineering, Mathematics and Computer Science
Delft University of Technology

Menno van Zaanen
Department of Communication and Information Sciences
Tilburg University

Rick Smetsers
Institute for Computing and Information Sciences
Radboud University Nijmegen

These proceedings contains the works that have been presented at the 13th International Conference on Grammatical Inference (ICGI), held in Delft the Netherlands in October 5-7 2016. Out of the 15 full papers, 10 were accepted for publication in the proceedings and presentation at the conference. In addition to these works, 9 extended abstract were accepted for a short presentation at the conference. The extended abstract are not included in the proceedings and can be found online at http://icgi2016.tudelft.nl, as well as the slides of all presentations. The proceedings contain a diverse range of topics in grammatical inference, such as: an easy to use spectral learning toolbox in Python containing several variants of the classic spectral learning algorithm, new approaches for estimating whether a grammar satisfies the k-finite kernel and context properties, properties of context-free grammars, and results on the identification in the limit of dependency grammars. There are also works with new results in active learning with helpful labels, learning from infinite alphabets, learning tree transducers, fast frequent pattern discovery, and model theory.

The conference program also included three keynotes from top researchers in the field. Hendrik Blockeel from KU Leuven presented his results and ideas on learning relational grounded languages. Borja Balle from Lancaster University presented his and Mehryar Mohri results on learning weighted automata, including several data-dependent learning guarantees based on Rademacher complexity. Valentin Spitkovsky demonstrated how one can learn the hierarchical structure of a language in an unsupervised fashion from free-form natural language.

Finally, there was the SPiCe international sequence prediction challenge workshop, where both organizers and participants presented their works and methods used during the competition held in July 2016. Papers describing these methods are also included in the proceedings. We congratulate the winners of the challenge team shib, consisting of Chihiro Shibata and Jeffrey Heinz, who used a new Deep Learning based method.
We would like to express our gratitude to everyone involved in ICGI 2016, including invited speakers, program committee, SPiCe organization, and the local organization consisting of Sandra Wolff, Gaetano Pellegrino, Qin Lin, and us three.

Rick Smetsers, Menno van Zaanen, Sicco Verwer

Program Committee
Pieter Adriaans (University of Amsterdam), Borja Balle (Lancaster University), Leonor Becerra Bonache (Laboratoire Hubert Curien), Jorge Castro (Technical University Catalonia), Alexander Clark (King’s College London), Christophe Costa Florencio, François Coste (IRISA INRIA/CNRS), D. Gnanaraj Thomas (Madras Christian College), François Denis (Laboratoire d’Informatique Fondamentale de Marseille), Rémi Eyraud (Laboratoire d’Informatique Fondamentale de Marseilles), Henning Fernau (University Trier), Javier Gallego-Sánchez (University of Alicante), Ricard Gavaldà (Universitat Politecnica de Catalunya), Roland Groz (Laboratoire d’Informatique de Grenoble), Amaury Habrard (University of Saint-Etienne), Jeffrey Heinz (University of Delaware), Falk Howar (Clausthal University of Technology / IPSSE), Muhammad Naeem Irfan (Laboratoire d’Informatique de Grenoble), Jean-Christophe Janodet (University of Evry), Baptiste Jeudy (Laboratoire Hubert Curien), Makoto Kanazawa (National Institute of Informatics Japan), Damián López (Universidad Politecnica de Valencia), Karl Meinke (Royal Institute of Technology (KTH) Stockholm), Tim Oates (University of Maryland Baltimore County), José Oncina (University of Alicante), Keisuke Otaki (Kyoto University), Ute Schmid (University of Bamberg), José Sempere (Universidad Politecnica de Valencia), Michael Siebers (Otto-Friedrich-Universität Bamberg), Rick Smetsers (Radboud University Nijmegen), Herbert Tanner (University of Delaware), Etsuji Tomita (University of Electro-Communications Japan), Jan Tretmans (TNO - Embedded Systems Innovation), Olgierd Unold (Wroclaw University of Technology), Frits Vaandrager (Radboud University Nijmegen), Sicco Verwer (Delft University of Technology), Neil Walkinshaw (University of Leicester), Wojciech Wieczorek (University of Silesia), Ryo Yoshinaka (Tohoku University), Thomas Zeugmann (Hokkaido University), Colin de La Higuera (University of Nantes), Nanne van Noord (Tilburg University), Menno van Zaanen (Tilburg University)

SPiCe Organization
Borja Balle (Lancaster University), Rémi Eyraud (Laboratoire d’Informatique Fondamentale de Marseilles), Franco Luque (Universidad Nacional de Córdoba and CONICET), Ariadna Quattoni (Xerox Research Center Europe), Sicco Verwer (Delft University of Technology)