Proceedings of the

9th
International Workshop
Finite State Methods and
Natural Language Processing

July 12–15, 2011
Université François Rabelais Tours
Blois, France
Preface

These proceedings contain the papers presented at the 9th International Workshop on Finite State Methods and Natural Language Processing (FSMNLP 2011), which was held in Blois (France), July 12–15, 2011, jointly with the 16th International Conference on Implementation and Application of Automata (CIAA 2011).

The workshop covers a wide range of topics from morphology to stringology to formal language theory. This volume contains the 14 regular and 3 short papers that were presented at the workshop. In total, 30 papers (25 regular and 5 short papers) were submitted to a doubly blind refereeing process, in which each paper was reviewed by 3 program committee members. The overall acceptance rate was 57%. The program committee was composed of internationally leading researchers and practitioners selected from academia, research labs, and companies.

The organizing committee would like to thank the program committee for their hard work, the referees for their valuable feedback, the invited speakers for their innovative contributions, and the local organizers for their tireless efforts. We are particularly grateful for significant sponsorship from the Campus de la CCI de Loir-et-Cher, the Université François-Rabelais Tours, the Centre National de la Recherche Scientifique, the Région Centre, the city of Blois, the Université de Rouen, the Université Paris-Est Marne-la-Vallée, the Communauté d’Agglomération de Blois (Agglopolys), the Ministère de l’Enseignement Supérieur et de la Recherche, Humanis, the Université d’Orléans and MAIF.

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Mark-Jan Nederhof, University of St Andrews (United Kingdom)
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Tuesday, July 12, 2011

9:00–9:30 Opening

9:30–10:30 Intersection for Weighted Formalisms
Mark-Jan Nederhof

11:00–12:00 Tutorial by Sylvain Lombardy

14:00–14:30 Modularization of Regular Growth Automata
Christian Wurm

14:30–15:00 Finite-state Representations Embodying Temporal Relations
Tim Fernando

15:00–15:30 Supervised and Semi-Supervised Sequence Learning for Recognition of Requisite Part and Effectuation Part in Law Sentences
Le-Minh Nguyen, Ngo Xuan Bach and Akira Shimazu

16:00–16:30 Compiling Simple Context Restrictions with Nondeterministic Automata
Anssi Yli-Jyrä

16:30–17:00 Constraint Grammar Parsing with Left and Right Sequential Finite Transducers
Mans Hulden

17:00–17:30 E-Dictionaries and Finite-State Automata for the Recognition of Named Entities
Cvetana Krstev, Duško Vitas, Ivan Obradović and Mišo Utvić


**Wednesday, July 13, 2011**

- 9:30–10:30 Invited Talk by Joachim Niehren
- 11:00–12:00 Tutorial by Sylvain Lombardy
- 12:30–13:00 FSMNLP business meeting
- 14:30–15:00 *A Practical Algorithm for Intersecting Weighted Context-free Grammars with Finite-State Automata*
  Thomas Hanneforth
- 15:00–15:30 *Open Source WFST Tools for LVCSR Cascade Development*
  Josef R. Novak, Nobuaki Minematsu and Keikichi Hirose
- 15:30–16:00 *Intersection of Multitape Transducers vs. Cascade of Binary Transducers: The Example of Egyptian Hieroglyphs Transliteration*
  François Barthélemy and Serge Rosmorduc
- 17:00–18:30 Guided Tour

**Thursday, July 14, 2011**

- 9:00–10:00 Invited Talk by Sheng Yu
- 10:00–11:00 Tutorial by Eric Laporte
- 11:30–12:30 Tutorial by Sylvain Lombardy
- 15:00–23:15 Excursion and Gala Dinner
Friday, July 15, 2011

9:00–9:20  A Note on Sequential Rule-Based POS Tagging  
Sylvain Schmitz

9:20–9:40  FTrace: A Tool for Finite-State Morphology  
James Kilbury, Katina Bontcheva and Younes Samih

9:40–10:00  Incremental Construction of Millstream Configurations Using Graph Transformation  
Suna Bensch, Frank Drewes, Helmut Jürgensen and Brink van der Merwe

10:00–11:00  Tutorial by Eric Laporte

11:30–12:00  Stochastic K-TSS Bi-Languages for Machine Translation  
M. Inés Torres and Francisco Casacuberta

12:00–12:30  Measuring the Confusability of Pronunciations in Speech Recognition  
Panagiota Karanasou, François Yvon and Lori Lamel

14:30–15:00  Fast Yet Rich Morphological Analysis  
Mohamed Altantawy, Nizar Habash and Owen Rambow

15:00–15:30  An Open-Source Finite State Morphological Transducer for Modern Standard Arabic  
Mohammed Attia, Pavel Pecina, Antonio Toral, Lamia Tounsi and Josef van Genabith

15:30–16:00  Recognition and Translation of Arabic Named Entities with NooJ Using a New Representation Model  
Héla Fehri, Kais Haddar and Abdelmajid Ben Hamadou

16:00–16:30  Closing

16:30–18:00  SIGFSM business meeting