ACL 2013

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Proceedings of the Fourth Workshop on Teaching Natural Language Processing

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Preface

Welcome to the Fourth Workshop on Teaching Natural Language Processing. Following the first three very successful ACL workshops on issues in teaching computational linguistics and natural language processing (in 2002, 2005 and 2008, http://www.teachingnlp.org), we meet together again to discuss the recent advances in educational tools and methodologies for this field and our contributors' experience with novel assignments, targeting various student populations, and integrating the teaching of computational linguistics into other courses and classroom activities.

In view of the fact that this year's ACL is held in Bulgaria, the second country (after the Soviet Union) to introduce linguistic Olympiads for secondary school students as a way of acquainting them and the general public with the science of language and the associated applied areas, this workshop has a special focus on Olympiads in linguistics and especially computational linguistics. We will talk about the basics, the composition of problems, the experience of some countries that have joined the linguistic Olympic community relatively recently and of the challenges of the young but dynamic International Linguistics Olympiad.

We will discuss how computational linguistic problems illustrate fundamental or applied issues in natural language processing, rather than individual languages or linguistic theory. Although this variety of the self-sufficient linguistic problem has always had a presence at linguistic contests, in the US and the other Anglophone countries it has become a primary feature, and its development is of eminent interest.

In addition to six papers in the special section on Olympiads in (Computational) Linguistics and seven in the general one on Teaching Natural Language Processing, the program of the workshop includes two panels.

We thank all authors who submitted papers to the workshop as well as the members of the program committee and the panelists.

Ivan Derzhanski and Dragomir Radev, workshop co-chairs

Organizers:

Ivan Derzhanski, Bulgarian Academy of Sciences Dragomir Radev, University of Michigan

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Steven Abney, University of Michigan Jason Eisner, Johns Hopkins University Dominique Estival, University of Western Sydney Dick Hudson, University College London Boris Iomdin, Russian Academy of Sciences Ben King, University of Michigan Zornitsa Kozareva, USC/ISI Lori Levin, Carnegie Mellon University Patrick Littell, University of British Columbia Deryle Lonsdale, Brigham Young University Rada Mihalcea, University of North Texas Vincent Ng, University of Texas, Dallas James Pustejovsky, Brandeis University Harold Somers, All Ireland Linguistics Olympiad

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Conference Program (Morning)

9:00-9:10 Welcome

9:10-10:30 Olympiads - PAPERS I (4 long papers)

(9:10-9:30) *Rosetta Stone Linguistic Problems* Bozhidar Bozhanov and Ivan Derzhanski

(9:30-9:50) *Linguistic Problems Based on Text Corpora* Boris Iomdin, Alexander Piperski and Anton Somin

(9:50-10:10) *Introducing Computational Concepts in a Linguistic Olympiad* Patrick Littell, Lori Levin, Jason Eisner and Dragomir Radev

(**10:10-10:30**) *Multilingual Editing of Linguistic Problems* Ivan Derzhanski

11:00-11:30 Olympiads - PAPERS II (1 long paper + 1 short paper)

(**11:00-11:20**) Learning from OzCLO, the Australian Computational and Linguistics Olympiad

Dominique Estival, John Henderson, Mary Laughren, Diego Mollá, Cathy Bow, Rachel Nordlinger, Verna Rieschild, Andrea C. Schalley, Alexander W. Stanley and Colette Mrowa-Hopkins

(11:20-11:30) The Swedish Model of Public Outreach of Linguistics to secondary school Students through Olympiads Patrik Roos and Hedvig Skirgård

11:30-12:30 Olympiads - PANEL

Conference Program (Afternoon)

14:00-15:40 Teaching NLP and CL - PAPERS (4 short papers + 3 long papers) (14:00-14:10) Correspondence Seminar: Bringing Linguistics to High Schools Matěj Korvas and Vojtěch Diatka (14:10-14:20) Artificial IntelliDance: Teaching Machine Learning through a *Choreography* Apoorv Agarwal and Caitlin Trainor (14:20-14:30) Treebanking for Data-driven Research in the Classroom John Lee, Ying Cheuk Hui and Yin Hei Kong (14:30-14:40) Learning Computational Linguistics through NLP Evaluation Events: the experience of Russian evaluation initiative Anastasia Bonch-Osmolovskaya, Svetlana Toldova and Olga Lyashevskaya (14:40-15:00) A Virtual Manipulative for Learning Log-Linear Models Francis Ferraro and Jason Eisner (15:00-15:20) Teaching the Basics of NLP and ML in an Introductory Course to Information Science Apoorv Agarwal (15:20-15:40) Semantic Technologies in IBM Watson Alfio Gliozzo, Or Biran, Siddharth Patwardhan and Kathleen McKeown 16:00-17:30 **Teaching NLP and CL - PANEL**