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Proceedings of the 4th ACL-SIGSEM Workshop on Prepositions

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Introduction

This volume contains the papers presented at the Fourth ACL-SIGSEM Workshop on Prepositions. This workshop is endorsed by the ACL Special Interest Group on Semantics (ACL-SIGSEM), and is hosted in conjunction with ACL 2007, taking place on 28th June, 2007 in Prague, the Czech Republic.

Prepositions, postpositions and other adpositions have received a considerable amount of interest in recent years. Researchers from linguistics, artificial intelligence and psycholinguistics have examined spatial and temporal aspects of prepositions, their cross-linguistic differences, monolingual and cross-linguistic contrasts, the role of prepositions in syntactic alternations and their semantics in situated dialog. In languages like English and German, phrasal verbs have also been the subject of considerable research, ranging from the development of techniques for their automatic extraction from corpora to methods for determining their semantics. In other languages, like Romance languages or Hindi, the focus has been either on the incorporation of the preposition or its inclusion in the prepositional phrase. All these configurations are important both semantically and syntactically in natural language understanding and processing.

This workshop builds on the success of three previous workshops on prepositions (held in Toulouse, 2003, Colchester, 2005 and Trento, 2006) in providing a forum for researchers to present their current work on these areas. The aim of these workshops has been to bring together researchers from a variety of backgrounds to discuss the syntax, semantics, description, representation and cross-linguistic aspects of prepositions in order to promote collaboration.

We received 16 submissions in total. Each submission was reviewed by at least 3 members of the program committee who not only judged each submission but also gave detailed comments to the authors. Of the received papers 8 were selected for presentation in the workshop: 5 as full-length 8-page papers, and 3 as 6-page short papers.

These eight papers deal with prepositions in six languages (English, French, German, Hindu, Italian and Telugu) and they address applications as diverse as generating route descriptions, grammar checking, and machine translation. The present proceedings thus contain work on:

- investigating determinerless prepositional phrases in German and measuring their productivity with a mathematical approach [Dmges et al.]
- a corpus study to infer the semantics of temporal prepositions in Italian [Caselli and Quochi]
- language technology-oriented lexicography for French prepositions (merging information from different sources and re-structuring them) [Fort and Guillaume]
- an empirical evaluation of geometric constraints on the interpretation of projective English prepositions [Hying] and, in related research, landmark classifications based on English prepositions towards an improved generation of route descriptions [Furlan et al.]
- checking correct preposition usage for English by modeling their contexts with feature vectors [De Felice and Pulman] and by using a maximum entropy classifier combined with rule-based filters [Chodorov et al.]

- the prediction of the correct preposition in English to Hindu and Telugu machine translation [Husain et al.]

We would like to thank all the authors for sharing their research and the members of the program committee for their careful reviews and useful comments to the authors. We would also like to thank Timothy Baldwin and Valia Kordoni for their advice in the planing stages of this workshop, and the ACL 2007 organising committee and workshop coordinators for making this workshop possible.

Fintan Costello, John Kelleher and Martin Volk

May 2007

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