

# CoNLL97

## Computational Natural Language Learning

Proceedings of the 1997 Meeting of the ACL  
Special Interest Group in Natural Language Learning

*Editor: T. Mark Ellison*

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Held in conjunction with the 1997 meeting of  
the Association for Computational Linguistics.



## PREFACE

The field of computational natural language learning (NLL) is not a new one; research in it has been pursued for more than forty years. The last seven years, however, have seen a growth in interest and, correspondingly, in meetings addressing this topic. These have been held under the auspices of: COLING (The Unfinished Language, 90), DARPA (90/91), AAAI (MLNLO/CNLP, 91/93), IJCAI (NLL, 91), ECML (Machine Learning and Text Analysis, 93), the European Networks of Excellence ELSNET and MLNET (MLNLS, 94), and ESSLLI (96).

This year, however, is the first time that the ACL's special interest group in natural language learning have organised a meeting in conjunction with an (E)ACL conference. The papers contained in this volume are those which have been accepted to the conference.

In this meeting, we have attempted to cover as broad a range of topics within the field as possible. The range extends from message understanding, through word categorization, ambiguity resolution, learner modelling and text segmentation to the application of neural networks for learning speech and phonology.

The combination of this vibrant field, with the occasion of joint EACL/ACL meeting make the studies collected in this volume an exciting and stimulating representation of the field.

I would like to take this opportunity to thank my fellows on the program committee, and the other reviewers who helped contributed towards this workshop.

T. Mark Ellison, *University of Edinburgh*

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09:00-09:15	<b>Opening</b>
09:15-09:40	<i>Montse Maritxalar, Arantza Díaz de Ilarraz and Maite Oronoz</i> <b>From Psycholinguistic Modelling of Interlanguage in Second Language Acquisition to a Computational Model</b>
09:40-10:05	<i>Werner Winiwarter and Yahiko Kambayashi</i> <b>A Comparative Study of the Application of Different Learning Techniques to Natural Language Interfaces</b>
10:05-10:30	<i>Christoph Tillmann and Hermann Ney</i> <b>Word Triggers and the EM Algorithm</b>
10:30-10:50	<b>MORNING BREAK</b>
10:50-11:15	<i>Mehmet Kayaalp, Ted Pedersen and Rebecca Bruce</i> <b>A Statistical Decision Making Method: A Case Study on Prepositional Phrase Attachment</b>
11:15-11:40	<i>Jakub Zavrel, Walter Daelemans and Jorn Veenstra</i> <b>Resolving PP attachment Ambiguities with Memory-Based Learning</b>
11:40-12:05	<i>Wide R. Hogenhout and Yuji Matsumoto</i> <b>A Preliminary Study of Word Clustering Based on Syntactic Behavior</b>
12:05-12:30	<i>Miles Osborne and Ted Briscoe</i> <b>Learning Stochastic Categorial Grammars</b>
12:30-12:55	<i>Khalil Sima'an</i> <b>Explanation-Based Learning of Data-Oriented Parsing</b>
12:55-14:30	<b>LUNCH</b>
14:30-15:15	<b>SIGNLL Meeting</b>
15:15-15:40	<i>Jennifer Rodd</i> <b>Recurrent Neural-Network Learning of Phonological Regularities in Turkish</b>
15:40-16:05	<i>Ramin Charles Nakisa and Kim Plunkett</i> <b>Evolution of a Rapidly Learned Representation for Speech</b>
16:05-16:30	<i>Emin Erkan Korkmaz and Göktürk Üçoluk</i> <b>A Method for Improving Automatic Word Categorization</b>
16:30-16:50	<b>AFTERNOON BREAK</b>
16:50-17:15	<i>Amit Bagga and Joyce Yue Chai</i> <b>A Trainable Message Understanding System</b>
17:15-17:40	<i>Mary Elaine Calif and Raymond J. Mooney</i> <b>Relational Learning of Pattern-Match Rules for Information Extraction</b>
17:40-18:05	<i>Ji Donghong, He Jun and Huang Changning</i> <b>Learning New Compositions from Given Ones</b>
18:05-18:30	<i>Laura Mayfield Tomokiyo and Klaus Ries</i> <b>What makes a word: Learning base units in Japanese for speech recognition</b>
18:30-18:55	<i>David M. W. Powers</i> <b>Learning and Application of Differential Grammars</b>
18:55-19:00	<b>Closing</b>