

Proceedings of the
**10th European Workshop on
Natural Language Generation
(ENLG-05)**

Aberdeen, Scotland

8-10 August 2005

Edited by

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Preface

We are happy to introduce the proceedings of the 10th European Workshop on Natural Language Generation (ENLG-05). This workshop is the tenth in a biennial series of workshops on natural language generation that has been running since 1987. Previous European workshops have been held at Royaumont, Edinburgh, Judenstein, Pisa, Leiden, Duisburg, Toulouse and Budapest. The series provides a regular forum both for NLG specialists and for researchers who may not think of themselves as part of the NLG community.

The 2005 workshop, immediately following IJCAI-2005 in Edinburgh, spans the interest areas of natural language generation and artificial intelligence. We have selected 16 full papers and 12 poster papers covering a wide range of topics, including research that integrates NLG with AI, with ontologies, and with spoken and multimodal dialogue systems, in addition to new research on mainstream NLG issues.

We would like to thank the members of the program committee for their timely reviews of the exceptionally large number of submitted papers. In particular, we thank Kevin Knight, our invited speaker. We also thank SIGGEN for endorsing the workshop, and both EPSRC and the University of Aberdeen for their support.

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(co-organizers)

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Invited Talk

Tree Transducers for Machine Translation and Generation

Kevin Knight

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Abstract: Probabilistic finite-state methods have been very successful for natural language processing (NLP) problems like tagging, entity identification, and transliteration. These methods have also been packaged in very useful software toolkits. However, they are not so good for attacking problems with large-scale reordering (translation, generation, paraphrasing, question answering, etc.) and sensitivity to syntax. Over the past three years, new probabilistic tree-based models have been built and tested for a variety of NLP applications. Many of these models turn out to be instances of tree transducers, a formal automata model first described by W. Rounds and J. Thatcher in 1970. This opens up new opportunities for us to marry deeper representations, automata theory, and machine learning, and to create general-purpose tools that can be applied to many NLP problems. This talk will cover new learning algorithms for tree automata, and large-scale natural language experiments.

Note: In addition to the invited talk at ENLG-05, Kevin Knight will give a tutorial on Statistical Machine Translation and Generation the day after the workshop.

Full Papers

