## **EACL-2006**

# 11<sup>th</sup> Conference of the European Chapter of the Association for Computational Linguistics

Proceedings of the Workshop on

# Adaptive Text Extraction and Mining (ATEM 2006)

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#### INTRODUCTION

With the explosive growth of the Web and intranets, the amount of information that is available in unstructured and semistructured documents keeps increasing at an unprecedented rate. These terabytes of text contain valuable information for virtually every domain of activity, from education to business to counter-terrorism. However, existing tools for accessing and exploiting this data are just not effective enough to satisfy user expectations.

Recent years have brought significant interest and progress in developing techniques for the automatic extraction and mining of information from text. In contrast to the previous generation of extraction systems which relied on (expensive and brittle) hand-written rules, most recent approaches use machine learning techniques to uncover the structure of text. To further reduce the users' burden, researchers are also investigating a variety of active, semi-supervised, and unsupervised learning algorithms that minimize the amount of labeled documents required for training.

The increasing interest of adaptive extraction and mining from texts is also demonstrated by several recent initiatives:

- The Automatic Content Extraction program was started a few years ago by NIST (www.itl.nist.gov/iad/894.01/tests/ace).
- The PASCAL challenge on Machine Learning for Information Extraction, whose aim was to assess the current state of the art, dentifying future challenges and to foster additional research in the field (nlp.shef.ac.uk/pascal).
- Various initiatives related to the life sciences. BioCreAtIvE such as Extraction (Critical Assessment Information Biology; οf systems in www.pdg.cnb.uam.es/BioLINK/BioCreative.eval.html), and the Shared Task proposed at the International Joint Workshop on Natural Language Processing in Biomedicine and its Applications; research.nii.ac.jp/ collier/workshops/JNLPBA04st.htm).

Adaptive extraction and mining from texts is an extremely active area of research that lies at the intersection of diverse fields such as information extraction, text mining, machine learning, data mining, link analysis and relationship discovery, information retrieval, natural language processing, information integration, distributed databases, and knowledge capture. Developments in any of these fields have an immediate effect on the others, so it is important to foster the free exchange of ideas among researchers that work on the various aspects of adaptive text extraction and mining. The purpose of this workshop is to bring together researchers and practitioners from all these communities, so that they can discuss recent results and foster new directions of research in the field. The workshop builds on the success of previous workshops on the same topic at AAAI-1999, ECAI-2000, IJCAI-2001, ECML 2003, and AAAI-2004 (see www.isi.edu/info-agents/RISE/Resources.html for details). The workshop will also serve to follow up ideas discussed at the 2005 Dagstuhl Workshop on Machine Learning for the Semantic Web (www.smi.ucd.ie/Dagstuhl-MLSW), much of which focused on adaptive information extraction.

The program includes nine papers: eight papers come from Europe (Germany, Italy, Ireland, Spain, Sweden, The Netherlands, United Kingdom), one from Japan/USA. Each paper was reviewed by at least two reviewers.

We thank the reviewers for their cooperation in the reviewing process, especially considering the very short interval between submission and notification.

Fabio Ciravegna Claudio Giuliano Nicholas Kushmerick Alberto Lavelli Ion Muslea February 2006

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#### **Workshop Program**

#### 9:00-10:30 Section 1

Learning Effective Surface Text Patterns for Information Extraction Gijs Geleijnse and Jan Korst

A Hybrid Approach for the Acquisition of Information Extraction Patterns Mihai Surdeanu, Jordi Turmo and Alicia Ageno

#### 10:30-11:00 Coffee Break

#### 11:00-12:30 Section 2

An Experimental Study on Boundary Classification Algorithms for Information Extraction using SVM Jose Iria, Neil Ireson and Fabio Ciravegna

Simple Information Extraction (SIE): A Portable and Effective IE System Claudio Giuliano, Alberto Lavelli and Lorenza Romano

Transductive Pattern Learning for Information Extraction
Brian McLernon and Nicholas Kushmerick

#### 12:30-14:30 Lunch

#### 14:30-16:00 Section 3

Spotting the 'Odd-one-out': Data-Driven Error Detection and Correction in Textual Databases
Caroline Sporleder, Marieke van Erp, Tijn Porcelijn and Antal van den Bosch

Recognition of synonyms by a lexical graph Peter Siniakov

Active Annotation
Andreas Vlachos

#### 16:00-16:30 Coffee Break

#### 16:30-18:00 Section 4

Expanding the Recall of Relation Extraction by Bootstrapping Junji Tomita, Stephen Soderland and Oren Etzioni

**PANEL** 

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