

ACL HLT 2011

**Workshop on Computational Approaches to
Subjectivity and Sentiment Analysis
WASSA**

Proceedings of the Workshop

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Foreword

Recent years have marked the beginning and expansion of the Social Web, in which people freely express and respond to opinion on a whole variety of topics. While the growing volume of subjective information available allows for better and more informed decisions of the users, the quantity of data to be analyzed imposed the development of specialized Natural Language Processing (NLP) systems that automatically detect subjectivity and sentiment in text and subsequently extract, classify and summarize the opinions available on different topics. Although the subjectivity and sentiment analysis research fields have been highly dynamic in the past years, dealing with subjectivity and sentiment in text has proven to be a complex, interdisciplinary problem that remains far from being solved. Its challenges include the need to address the issue from different perspectives and at different levels, depending on the characteristics of the textual genre, the language(s) treated and the final application for which the analysis is done.

Inspired by the objectives we aimed at in the first edition of the Workshop on Computational Approaches to Subjectivity Analysis (WASSA 2010) and the final outcome, the purpose of the second edition of the Workshop on Computational Approaches to Subjectivity and Sentiment Analysis (WASSA 2.011) was to create a framework for presenting and discussing the challenges related to subjectivity and sentiment analysis in NLP, from an interdisciplinary theoretical and practical perspective.

WASSA 2.011 was organized in conjunction to the 49th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies, on June 24, 2011, in Portland, Oregon, U.S.A. We received a total of 51 submissions, from a wide range of countries, of which 9 were accepted as full papers (17%) and another 15 as short papers (29%). Each paper has been reviewed by 2 members of the Program Committee. The accepted papers were all highly assessed by the reviewing committee, the best paper receiving an average punctuation of 4.5 out of 5.

The main topics of the accepted papers are the creation, annotation and evaluation of resources for subjectivity and sentiment analysis in a monolingual, cross-lingual and multilingual setting, subjectivity and sentiment analysis in different text types and at different levels of granularity. Additionally, WASSA 2.011 authors have contemplated interdisciplinary analyses, concerning the gender-specificity analysis in subjective texts, the relation between sentiment and subjectivity analysis with social network mining, opinion question answering and emotion detection.

The invited talks reflected the interdisciplinary nature of the research in affect-related phenomena as well. Prof. Jonathan Gratch, from the University of Southern California presented a talk on “Emotion theories, models and their relevance to sentiment analysis”, from a more general Artificial Intelligence perspective. Prof. Claire Cardie gave a talk on the challenges related to the implementation of sentiment analysis systems in real-world applications.

Given the demonstrated and increasingly growing interest in the topics addressed, we hope that WASSA will continue to be organized in the next years and become an established forum for researchers to discuss and debate the best practices in subjectivity and sentiment analysis.

We would like to thank the ACL-HLT 2011 Organizers for the help and support at the different stages of

the workshop organization process. We are also especially grateful to the Program Committee members and the external reviewers for the time and effort spent assessing the papers. We would like to extend our thanks to our invited speakers – Prof. Jonathan Gratch and Prof. Claire Cardie, for accepting to deliver the keynote talks.

Secondly, we would like to express our gratitude for the official endorsement we received from SIGANN (ACL Special Interest Group for Annotation) and SIGNLL (ACL Special Interest Group on Natural Language Learning).

Further on, we would like to thank the Editors of the Decision Support Systems Journal, published by Elsevier, for accepting to organize a Special Issue of this journal containing the extended versions of the WASSA 2.011 full papers.

We would like to express our gratitude to the team at the Department of Software and Computing Systems at the University of Alicante - Javier Fernández, who created the WASSA logo and to Miguel Ángel Varo and Miguel Ángel Baeza - for the technical support they provided.

Last, but not least, we are grateful for the financial support given by Academic Institute for Research in Computer Science of the University of Alicante (Instituto Universitario para la Investigación en Informática, Universidad de Alicante), the Spanish Ministry of Science and Education of the Spanish Government (Ministerio de Ciencia e Innovación - Gobierno de España) through the TIN2009-13391-C04-01 grant, and to the Education Council of the Valencian Community (Conselleria d'Educació - Generalitat Valenciana), through the PROMETEO/2009/119 and ACOMP/2010/286 grants.

Alexandra Balahur, Ester Boldrini, Andrés Montoyo, Patricio Martínez-Barco
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Invited Speakers:

Claire Cardie - Cornell University, U.S.A. - Appinions, U.S.A.

Jonathan Gratch - University of Southern California, U.S.A.

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Workshop Program

Friday June 24, 2011

(8:45) Opening Remarks

(9:00) Invited talk (I): Prof. Jonathan Gratch

(9:40) Invited talk (II): Prof. Claire Cardie

(10:15) Best Paper Award

Cats Rule and Dogs Drool!: Classifying Stance in Online Debate

Pranav Anand, Marilyn Walker, Rob Abbott, Jean E. Fox Tree, Robeson Bowmani and Michael Minor

(10:40) Break

(11:00) Session 1: Resources for Sentiment Analysis

A verb lexicon model for deep sentiment analysis and opinion mining applications

Isa Maks and Piek Vossen

Experiments with a Differential Semantics Annotation for WordNet 3.0

Dan Tufis and Dan Stefanescu

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Generating Semantic Orientation Lexicon using Large Data and Thesaurus

Amit Goyal and Hal Daume

Friday June 24, 2011 (continued)

(12:30) Lunch Break

(13:30) Session 2: Resources and Applications of Sentiment Analysis

Developing Robust Models for Favourability Analysis

Daoud Clarke, Peter Lane and Paul Hender

Detecting Implicit Expressions of Sentiment in Text Based on Commonsense Knowledge

Alexandra Balahur, Jesús M. Hermida and Andrés Montoyo

A Link to the Past: Constructing Historical Social Networks

Matje van de Camp and Antal van den Bosch

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Saif Mohammad and Tony Yang

Developing Japanese WordNet Affect for Analyzing Emotions

Yoshimitsu Torii, Dipankar Das, Sivaji Bandyopadhyay and Manabu Okumura

(15:30) Break

(16:00) Session 3: Sentiment Classification

Improving a Method for Quantifying Readers' Impressions of News Articles with a Regression Equation

Tadahiko Kumamoto, Yukiko Kawai and Katsumi Tanaka

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Antonio Reyes and Paolo Rosso

Friday June 24, 2011 (continued)

(17:30) Poster Session

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Alexandru-Lucian Ginsca, Emanuela Boros, Adrian Iftene, Diana Trandabat, Mihai Toader, Marius Corici, Cenel-Augusto Perez and Dan Cristea

