WASSA 2012

3rd Workshop on Computational Approaches to Subjectivity and Sentiment Analysis

Proceedings of the Workshop

July 12, 2012
Jeju, Republic of Korea

Endorsed by SIGSEM (ACL Special Interest Group on Computational Semantics)
Endorsed by SIGNLL (ACL's Special Interest Group on Natural Language Learning)
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Introduction

In the past years, the quantity of contents generated by users on the Web, in social networking sites, fora and microblogs has reached an unprecedented level. All this data adds on to the contents generated in traditional media, such as newspapers, bringing additional factual, as well as a high quantity of opinionated and subjective information. In the context of the society in which we live, where sifting through the immense quantities of information to gather knowledge has become a must, the challenge of processing opinionated and subjective information is becoming more and more a focus to the Natural Language Processing (NLP) research communities worldwide.

In the past decade, the interest in proposing computational methods to deal with subjectivity and sentiment in text has grown constantly from the NLP community. However, although the subjectivity and sentiment analysis research fields have been highly dynamic in this period, much remains still to be done, so that systems dealing with subjectivity, sentiment and, more generally, affect in text, can be reliably used in critical decision-making environments. Moreover, the new means of communication and user connection, in microblogs and social networks, become more and more relevant to these two tasks, as the contexts (internal and external) of the information communication process bring about new challenges and applications to be explored.

Inspired by the above-mentioned issues and the objectives we aimed at in the first two editions of the Workshop on Computational Approaches to Subjectivity Analysis (WASSA 2010 and WASSA 2.011), the purpose of the third edition of the Workshop on Computational Approaches to Subjectivity and Sentiment Analysis (WASSA 2012) was to create a framework for presenting and discussing the challenges related to subjectivity and sentiment analysis in NLP and its applications, in traditional and Social Media contexts, from an interdisciplinary theoretical and practical perspective. WASSA 2012 was organized in conjunction to the 50th Annual Meeting of the Association for Computational Linguistics, on July 12, 2012, in Jeju, Korea.

At this third edition of the workshop, we received a total of 31 submissions, from a wide range of countries, of which 11 were accepted as full papers and another 4 as short papers. Each paper has been thoroughly reviewed by 3 members of the Program Committee. The accepted papers were all highly assessed by the reviewers, the best paper receiving an average punctuation (computed as an average of all criteria used to assess the papers) of 4.6 out of 5.

The main topics of the accepted papers are the creation and evaluation of resources for subjectivity and sentiment analysis in a cross-lingual and multilingual setting, subjectivity and sentiment analysis using semi-supervised and supervised methods in different types of texts (although the accent this year has been undoubtedly on Social Media texts) and affect detection in context. Additionally, the WASSA 2012 authors have enhanced the analysis of these phenomena beyond the traditional intra-textual aspects, towards the reader and writer intentions and interpretations, and have also analyzed the application of subjectivity and sentiment reseach in NLP to real-life, relevant scenarios (such as the detection of socially unacceptable behavior in online contexts).

The invited talks reflected the multimodal and interdisciplinary nature of the research in affect-related phenomena as well. Prof. Rada Mihalcea, from the University of North Texas, presented a talk on "Multimodal Sentiment Analysis", linking the textual aspects of affect detection to affect detection

in para-textual contexts. Prof. Janyce Wiebe's talk concentrated on the language ambiguity in the subjectivity analysis area. In her keynote on "Subjectivity Word Sense Disambiguation", she showed the importance of distinguishing among objective and subjective usages of word senses.

This year's edition has shown again that there is a demonstrated and increasingly growing interest in the topics addressed by WASSA and that the knowledge disseminated through this forum and the associated publications is bringing an important contribution to the research in subjectivity and sentiment analysis.

We would like to thank the ACL 2012 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. Rada Mihalcea and Prof. Janyce Wiebe, for accepting to deliver the keynote talks.

Secondly, we would like to express our gratitude for the official endorsement we received from SIGSEM (the ACL Special Interest Group on Computational Semantics), SIGNLL (the ACL Special Interest Group on Natural Language Learning) and SIGLEX (the Special Interest Group on the Lexicon of the Association for Computational Linguistics).

Further on, we would like to thank the Editors of the "Computer Speech and Language Journal", published by Elsevier, for accepting to organize a Special Issue of this journal containing the extended versions of the best full papers accepted at WASSA 2012.

We would like to express our gratitude to Yaniv Steiner from the European Commission Joint Research Centre (Italy), who created the WASSA logo and to Miguel Ángel Varo and Miguel Ángel Baeza, from the University of Alicante, for the technical support they provided.

Last, but not least, we are grateful for the financial support given by the Academic Institute for Research in Computer Science of the University of Alicante (Instituto Universitario para la Investigación en Informática, Universidad de Alicante).

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Prof. Dr. Rada Mihalcea, University of North Texas (U.S.A.)
Prof. Dr. Janyce Wiebe, University of Pittsburgh (U.S.A.)

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Conference Program

Thursday July 12, 2012

(8:30) Opening Remarks

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Multimodal Sentiment Analysis
Rada Mihalcea

(9:35) Invited talk (II): Prof. Dr. Janyce Wiebe

Subjectivity Word Sense Disambiguation
Janyce Wiebe

(10:30) Break

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Random Walk Weighting over SentiWordNet for Sentiment Polarity Detection on Twitter
Arturo Montejo-Ráez, Eugenio Martínez-Cámara, M. Teresa Martín-Valdivia and L. Alfonso Ureña-López

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Thursday July 12, 2012 (continued)

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(13:30) Session 2: Affect Detection and Classification (I)

Opinum: statistical sentiment analysis for opinion classification
Boyan Bonev, Gema Ramírez Sánchez and Sergio Ortiz Rojas

Sentimantics: Conceptual Spaces for Lexical Sentiment Polarity Representation with Contextuality
Amitava Das and Gambäck Björn

Analysis of Travel Review Data from Reader's Point of View
Maya Ando and Shun Ishizaki

Multilingual Sentiment Analysis using Machine Translation?
Alexandra Balahur and Marco Turchi

(15:30) Break

(16:00) Session 3: Affect Detection and Classification (II)

Unifying Local and Global Agreement and Disagreement Classification in Online Debates
Jie Yin, Nalin Narang, Paul Thomas and Cecile Paris

Prior versus Contextual Emotion of a Word in a Sentence
Diman Ghazi, Diana Inkpen and Stan Szpakowicz

Cross-discourse Development of Supervised Sentiment Analysis in the Clinical Domain
Phillip Smith and Mark Lee

POLITICAL-ADS: An annotated corpus for modeling event-level evaluativity
Kevin Reschke and Pranav Anand

Thursday July 12, 2012 (continued)

(17:30) Session 4: Applications of Subjectivity and Sentiment Analysis

Automatically Annotating A Five-Billion-Word Corpus of Japanese Blogs for Affect and Sentiment Analysis
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How to Evaluate Opinionated Keyphrase Extraction?
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