

NAACL HLT 2016

**7th Workshop on Computational Approaches to
Subjectivity, Sentiment and Social Media Analysis
WASSA 2016**

Proceedings of the Workshop[

June 16, 2016
San Diego, California, USA

WASSA 2016 is endorsed by SIGNLL, the ACL's Special Interest Group on Natural Language Learning.

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ISBN 978-1-941643-82-2

Introduction (TODO)

Emotions are an important part of our everyday lives. However, until quite recently, human affect was regarded in a dual manner - positively, for its regulatory power and negatively, as a sort of a "weakness" of the human spirit, that should ideally be rational, logical, *thinking* in a very matter of fact and consequence-based fashion.

Recent discoveries in Neuropsychology and the possibilities opened by the functional Magnetic Resonance Imaging have made it clear that emotions play a very important role for the well-functioning of the human body, both psychologically, as well as physically.

Apart from the importance emotions have for each human being individually, research in Social Psychology and disciplines such as Marketing, Mass-media Communication or Political Science, has shown time and time again that the emotional discourse, its content - in words with affective connotation and the combination thereof - is of paramount difference between the success and failure of social actions, consumer products or political candidates.

Given that nowadays messages with (sometimes) high emotional connotations are so easily shared using Social Media platforms and that their high volume makes manual sifting mostly impossible, the automatic processing of Subjectivity, Sentiment and Emotions in texts, especially in Social Media contexts is highly relevant.

Bearing these observations in mind, the aim of the 7th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (WASSA 2016) was to continue the line of the previous editions, bringing together researchers in Computational Linguistics working on Subjectivity and Sentiment Analysis and researchers working on interdisciplinary aspects of affect computation from text. Starting with 2013, WASSA has extended its scope and focus to Social Media phenomena and the impact of affect-related phenomena in this context. The past two editions have shown important breakthroughs in dealing with the challenges of these types of texts, in monolingual, multilingual and cross-domain contexts.

WASSA 2016 was organized in conjunction to the 15th Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies in San Diego, California, on June 16, 2016.

For this year's edition of WASSA, we received a total of 32 submissions, from universities and research centers all over the world, out of which 8 were accepted as long and another 13 as short papers. Each paper has been thoroughly reviewed by at least 2 members of the Program Committee. The accepted papers were all highly assessed by the reviewers, bringing novelty in the technical and knowledge employed and creativity into the research area.

The main topics of the accepted papers are related to challenges in dealing with language and phenomena in Social Media - Twitter and Facebook mining, but also the use of the particular structure of Social Media texts to improve the sentiment and subjectivity classification. The abundance of applications stemming from Sentiment Analysis shows more and more the importance of work in this field and the high number of scenarios where tools performing Sentiment Analysis are becoming of high importance.

Additionally, articles presenting valuable work concentrating on building lexica for this field demonstrate that there is still a high requirement to develop such resources. Finally, some articles deal with the issue of sentiment visualization and the use of such tools to improve the performance of automatic systems for emotion detection and classification.

This year's edition has again shown that the topics put forward to discussion by WASSA are of high interest to the research community and that the papers chosen to be debated in this forum bring an important development to the SSA research area.

We would like to thank the NAACL HLT 2016 Organizers and Workshop Chairs 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 – Dr. Seth Grimes, Dr. Morteza Dehghani and Dr. Richard Socher - for accepting to deliver the keynote talks, opening new horizons for research and applications of Sentiment Analysis.

Secondly, we would like to express our gratitude for the official endorsement we received from SIGNLL - ACL's Special Interest Group on Natural Language Learning.

We would like to express our gratitude to Yaniv Steiner, who created the WASSA logo and to the entire Europe Media Monitor team at the European Commission Joint Research Centre, for the technical support they provided.

Alexandra Balahur, Erik van der Goot, Piek Vossen and Andrés Montoyo

WASSA 2016 Chairs

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European Commission Joint Research Centre
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Dan Tufis, RACAI (Romania)
Alfonso Ureña, University of Jaén (Spain)
Janyce Wiebe - University of Pittsburgh (U.S.A.)
Michael Wiegand, Saarland University (Germany)
Taras Zagibalov, Brantwatch (U.K.)

Invited Speakers:

Dr. Morteza Dehghani - University of Southern California
Dr. Seth Grimes - Alta Plana Corporation
Dr. Richard Socher - MetaMind

Invited Papers from:

Manfred Klenner - University of Zuerich
Saif Mohammad - National Research Council Canada
Preslav Nakov - Qatar Computing Research Institute (QCRI)
Fabrizio Sebastiani - Qatar Computing Research Institute (QCRI)
Carlo Strapparava - Fondazione Bruno Kessler

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Conference Program

Thursday, June 16, 2016

08:40–09:00 **Opening Remarks and Intro Talk**

08:45–09:00 *Sentiment Analysis - What are we talking about?*
Alexandra Balahur

09:00–10:30 **Session 1: Sentiment Analysis Perspectives in Social Media**

09:00–09:40 *Sentiment, Subjectivity, and Social Analysis Go ToWork: An Industry View - Invited Talk*
Seth Grimes

09:40–10:05 *Rumor Identification and Belief Investigation on Twitter*
Sardar Hamidian and Mona Diab

10:05–10:30 *Modelling Valence and Arousal in Facebook posts*
Daniel Preoțiu-Pietro, H. Andrew Schwartz, Gregory Park, Johannes Eichstaedt, Margaret Kern, Lyle Ungar and Elisabeth Shulman

10:30–11:00 *Coffee Break*

11:00–12:30 **Session 2: Sentiment Detection for Social Media Applications**

11:00–11:40 *Purity Homophily in Social Networks - Invited Talk*
Morteza Dehghani

11:40–12:05 *Hit Songs' Sentiments Harness Public Mood & Predict Stock Market*
Rachel Harsley, Bhavesh Gupta, Barbara Di Eugenio and Huayi Li

12:05–12:30 *Fashioning Data - A Social Media Perspective on Fast Fashion Brands*
Rupak Chakraborty, Senjuti Kundu and Prakul Agarwal

12:30–14:00 *Lunch Break*

Thursday, June 16, 2016 (continued)

14:00–15:30 Session 3: New Approaches in Sentiment Analysis

14:00–14:40 *Deep Learning for Sentiment Analysis - Invited Talk*
Richard Socher

14:40–15:05 *Sentiment Lexicon Creation using Continuous Latent Space and Neural Networks*
Pedro Dias Cardoso and Anindya Roy

15:05–15:30 *The Effect of Negators, Modals, and Degree Adverbs on Sentiment Composition*
Svetlana Kiritchenko and Saif Mohammad

15:30–16:00 Coffee Break

16:00–17:40 Session 4: Overview and Applications of Sentiment Analysis

16:00–16:25 *How can NLP Tasks Mutually Benefit Sentiment Analysis? A Holistic Approach to Sentiment Analysis*
Lingjia Deng and Janyce Wiebe

16:25–16:50 *An Unsupervised System for Visual Exploration of Twitter Conversations*
Derrick Higgins, Michael Heilman, Adrianna Jelesnianska and Keith Ingersoll

16:50–17:10 *Threat detection in online discussions*
Aksel Wester, Lilja Øvrelid, Erik Velldal and Hugo Lewi Hammer

17:10–17:30 *Classification of comment helpfulness to improve knowledge sharing among medical practitioners.*
Pierre André Ménard and Caroline Barrière

17:20–17:30 Break

Thursday, June 16, 2016 (continued)

18:00–19:30 Session 5: Posters

Political Issue Extraction Model: A Novel Hierarchical Topic Model That Uses Tweets By Political And Non-Political Authors

Aditya Joshi, Pushpak Bhattacharyya and Mark Carman

Early text classification: a Naïve solution

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Fracking Sarcasm using Neural Network

Aniruddha Ghosh and Dr. Tony Veale

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19:30–20:00 Closing discussion - "Where do we go from here?"

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