WASSA 2018

The 9th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis

Proceedings of the Workshop

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Introduction

Research in automatic Subjectivity and Sentiment Analysis (SSA), as subtasks of Affective Computing and Natural Language Processing (NLP), has flourished in the past years. The growth in interest in these tasks was motivated by the birth and rapid expansion of the Social Web that made it possible for people all over the world to share, comment or consult content on any given topic. In this context, opinions, sentiments and emotions expressed in Social Media texts have been shown to have a high influence on the social and economic behaviour worldwide. SSA systems are highly relevant to many real-world applications (e.g. marketing, eGovernance, business intelligence, social analysis) and also to many tasks in Natural Language Processing (NLP) - information extraction, question answering, textual entailment, to name just a few. The importance of this field has been proven by the high number of approaches proposed in research in the past decade, as well as by the interest that it raised from other disciplines (Economics, Sociology, Psychology, Marketing, Crisis Management disciplines (Economics, Sociology, Psychology, Marketing, Crisis Management, and Behavioral Studies, Digital Humanities) and the applications that were created using its technology.

Next to the growth in the diversity of applications, task definitions change towards more complex challenges: Subjectivity, polarity recognition and opinion mining has been enriched with fine-grained aspect and target level predictions. Polarity as a concept is complemented by emotion models as defined from psychological research.

In spite of the growing body of research in the area in the past years, dealing with affective phenomena 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.

The aim of the 9th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (WASSA 2018) 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.

This year, we also organized a track on implicit emotion recognition: http://implicitemotions.wassa2018.com/

Participants were given a tweet from which a certain emotion word is removed. That word is one of the following: "sad", "happy", "disgusted", "surprised", "angry", "afraid" or a synonym of one of them. The task was to predict the emotion the excluded word expresses: Sadness, Joy, Disgust, Surprise, Anger, or Fear.

With this formulation of the task, we provided data instances which are likely to express an emotion. However, the emotion needs to be inferred from the causal description, which is typically more implicit than an emotion word.

For the main workshop, we accepted 15/60 papers as long (25%) and another 17 as short, giving a total of 32/60 papers accepted - 53%. For the Implicit Emotions Shared Task, we got 19 system description paper submissions, out of which we accept 17. 49 papers in total will be presented at the workshop, together with the additional contribution from the invited speaker, Dr. Ellen Riloff.

Accepted papers deal with overcoming issues like language and domain dependence of sentiment analysis, irony and sarcasm and adaptation of sentiment and emotion detection systems to work in real-life scenarios.

We would like to thank the EMNLP 2018 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 speaker – Dr. Ellen Riloff - for accepting to deliver the keynote talks, opening new horizons for research and applications of sentiment and emotion detection from text.

Alexandra Balahur, Saif Mohammad, Veronique Hoste, Roman Klinger

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Invited Speaker:

Ellen Riloff, University of Utah, U.S.A.

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Workshop Program

Wednesday, October 31, 2018

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08:45–09:20 Invited talk

08:45–09:20 *Identifying Affective Events and the Reasons for their Polarity*
Ellen Riloff

09:20–10:35 Session 1: Resources and representations for affect detection from text

09:20–09:40 *Deep contextualized word representations for detecting sarcasm and irony*
Suzana Ilić, Edison Marrese-Taylor, Jorge Balazs and Yutaka Matsuo

09:40–10:00 *Implicit Subjective and Sentimental Usages in Multi-sense Word Embeddings*
Yuqi Sun, Haoyue Shi and Junfeng Hu

10:00–10:20 *Language Independent Sentiment Analysis with Sentiment-Specific Word Embeddings*
Carl Saroufim, Akram Almatarky and Mohammad AbdelHady

10:20–10:35 *Creating a Dataset for Multilingual Fine-grained Emotion-detection Using Gamification-based Annotation*
Emily Öhman, Kaisla Kajava, Jörg Tiedemann and Timo Honkela

10:35–11:00 ***Tea/Coffee Break***

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11:00–12:30 Session 2: The WASSA Shared Task on Emotion Intensity

11:00–11:25 *IEST: WASSA-2018 Implicit Emotions Shared Task*
Roman Klinger, Orphee De Clercq, Saif Mohammad and Alexandra Balahur

11:25–11:50 *Amobee at IEST 2018: Transfer Learning from Language Models*
Alon Rozental, Daniel Fleischer and Zohar Kelrich

11:50–12:10 *IIIDYT at IEST 2018: Implicit Emotion Classification With Deep Contextualized Word Representations*
Jorge Balazs, Edison Marrese-Taylor and Yutaka Matsuo

12:10–12:30 *NTUA-SLP at IEST 2018: Ensemble of Neural Transfer Methods for Implicit Emotion Classification*
Alexandra Chronopoulou, Aikaterini Margatina, Christos Baziotis and Alexandros Potamianos

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14:00–15:30 Session 3: Affect detection: issues and applications (I)

14:00–14:20 *Sentiment analysis under temporal shift*
Jan Lukeš and Anders Søgaard

14:20–14:40 *Not Just Depressed: Bipolar Disorder Prediction on Reddit*
Ivan Sekulic, Matej Gjurković and Jan Šnajder

14:40–15:00 *Topic-Specific Sentiment Analysis Can Help Identify Political Ideology*
Sumit Bhatia and Deepak P

15:00–15:15 *Saying no but meaning yes: negation and sentiment analysis in Basque*
Jon Alkorta, Koldo Gojenola and Mikel Iruskieta

15:15–15:30 *Leveraging Writing Systems Change for Deep Learning Based Chinese Emotion Analysis*
Rong Xiang, Yunfei Long, Qin Lu, Dan Xiong and I-Hsuan Chen

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15:30–16:00 ***Tea/Coffee Break***

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16:00–16:20 *Ternary Twitter Sentiment Classification with Distant Supervision and Sentiment-Specific Word Embeddings*
Mats Byrkjeland, Frederik Gørvell de Lichtenberg and Björn Gambäck

16:20–16:40 *Linking News Sentiment to Microblogs: A Distributional Semantics Approach to Enhance Microblog Sentiment Classification*
Tobias Daudert and Paul Buitelaar

16:40–17:00 *Aspect Based Sentiment Analysis into the Wild*
Caroline Brun and Vassilina Nikoulina

17:00–17:15 *The Role of Emotions in Native Language Identification*
Ilia Markov, Vivi Nastase, Carlo Strapparava and Grigori Sidorov

17:15–17:20 ***Break***

17:20–18:30 **Session 5: Posters**

Self-Attention: A Better Building Block for Sentiment Analysis Neural Network Classifiers
Artaches Ambartsoumian and Fred Popowich

Dual Memory Network Model for Biased Product Review Classification
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