

# ***8<sup>th</sup> Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (WASSA 2017)***

## **BACKGROUND**

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, public health) and also many tasks in 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, Behavioral Studies) and the applications that were created using its technology.

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, at different levels, and different modalities, depending on the characteristics of the textual genre, the language(s) treated and the final application for which the analysis is done. Additionally, SSA from Social Media texts has opened the way to many other types of analyses, linking textual data with images, social network metadata and social-media-specific text markings (e.g. Twitter hashtags).

Finally, the possibility to follow trends on opinions, while comparing and contrasting different sources of information (e.g. mainstream media vs. social media) allows for a more complete view and fairer opinion formation process.

## **ENVISAGED SCOPE OF WASSA 2017**

The aim of the 8<sup>th</sup> Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (WASSA 2017) is 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. Additionally, starting with WASSA 2013, we extended the focus to Social Media phenomena and the impact of affect-related phenomena in this context. In this new proposed edition, we would like to encourage the submission of long and short research and demo papers including, but not restricted to the following topics related to subjectivity and sentiment analysis:

- Resources for subjectivity, sentiment and social media analysis; (semi-)automatic corpora generation and annotation
- Opinion retrieval, extraction, categorization, aggregation and summarization

- Trend detection in social media using subjectivity and sentiment analysis techniques
- Data linking through social networks based on affect-related NLP methods
- Impact of affective data from social media
- Mass opinion estimation based on NLP and statistical models
- Online reputation management
- Topic and sentiment studies and applications of topic-sentiment analysis
- Domain, topic and genre dependency of sentiment analysis
- Ambiguity issues and word sense disambiguation of subjective language
- Pragmatic analysis of the opinion mining task
- Use of Semantic Web technologies for subjectivity and sentiment analysis
- Improvement of NLP tasks using subjectivity and/or sentiment analysis
- Intrinsic and extrinsic evaluations subjectivity and sentiment analysis
- Subjectivity, sentiment and emotion detection in social networks
- Classification of stance in dialogues
- Applications of sentiment and social media analysis systems
- Application of theories from other related fields (Neuropsychology, Cognitive Science, Psychology) to subjectivity and sentiment analysis
- Visualizing affect in traditional text sources as well as social media posts

In 2017, we also include two shared tasks on emotions as part of the workshop. New labeled training and test data will be provided and participants can test their automatic systems on this common dataset. Papers describing the systems will be presented at the WASSA workshop, either as oral presentations (top scoring systems) or as posters.

Details of previous iterations of WASSA are provided in the appendix (#submissions, acceptance rates, etc.).

## EMOTION DETECTION SHARED TASKS AT WASSA 2017

### **Task 1: Emotion intensity recognition from tweets**

Given a tweet and an emotion  $X$ , determine the intensity or degree of emotion  $X$  felt by the speaker - a real-valued score between 0 and 1 (0 stands for not feeling any emotion  $X$ , and 1 stands for feeling the maximum amount of emotion  $X$ ). The tweet along with the emotion  $X$  will be referred to as an instance. (Note: The absolute values of these scores are not meaningful on their own. They are meant to indicate whether one tweet is associated with more emotion intensity than another.)

Data: Training and test datasets will be provided for four emotions: joy, sadness, fear, and anger. For example, the anger training dataset will have tweets along with a real-valued score between 0 and 1 indicating the degree of anger felt by the speaker (0 stands for not angry at all, and 1 stands for feeling the maximum amount of anger). The test data will include only the tweet text. Gold emotion intensity scores will be released after the evaluation period. More details on the WASSA 2017 website.

### **Task 2: Emotion Linking and Classification (EmoLinC)**

Given a tweet about a topic/target, link it to a human need, motivation, objective, desire, goal and classify it according to either the emotion/emotions the author is most likely intending to convey,

the lack of emotion or the fact that the text is sarcastic/ironic. . More details on the WASSA 2017 website.

## ORGANIZERS

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