

PEOPLES 2016

**Workshop on Computational Modeling of People's Opinions,
Personality, and Emotions in Social Media**

Proceedings of the Workshop



December 12, 2016
Osaka, Japan

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Preface

Welcome to the first edition of PEOPLES (Workshop on Computational Modeling of People’s Opinions, Personality and Emotions in Social Media), co-located with the 26th International Conference on Computational Linguistics (COLING 2016) in Osaka, Japan.

The idea of organizing PEOPLES stemmed from two related observations, namely the availability of large amounts of spontaneous data covering a range of personal aspects and the fact that such aspects are usually studied in isolation. Social media users nowadays freely express what is on their mind at any moment in time, at any location, and about virtually anything. These large amounts of spontaneously produced texts open up a unique opportunity to learn more about such users, e.g., predicting demographic variables (age, gender), but also personality types, as well as emotions and opinion expressions. This observation isn’t new, of course, and this opportunity has largely been exploited in the recent years, with abundant works on sentiment analysis, emotion detection, and personality. However, such traits of human personality and behavior have indeed attracted a substantial amount of attention but have been mostly studied *in isolation*, often in different - but related - communities, such as NLP, CL, AI. Therefore, we thought that the time was ripe to bring these communities a step closer to study people’s traits and expressions jointly and in their interplay on such large volumes of available data.

The communities’ response with 33 received submissions coming from 22 countries and going well beyond typical NLP topics proved that there was a gap to be filled, and we are happy to be able to provide a context to start exchanging ideas.

In total, 20 papers were selected for inclusion in the proceedings. They cover a wide range of topics related to the three main PEOPLES themes (personality, emotion and opinion), their interaction and the impact of their modeling on social aspects like well-being, political preferences, humor and language use. We were pleased to see papers discussing different approaches to modeling, including active learning, distant supervision, multi-task learning, experimental studies with participants, and dealing with different data, including speech input and resources from multiple languages.

We hope that this might be the first in a series of workshops that brings together researchers in Computational Linguistics and Natural Language Processing who share an interest in personality, opinion and emotion detection, and especially in researching the intertwining of such traits and expressions.

We would like to thank our program committee consisting of 28 researchers from a variety of backgrounds for their insightful and constructive reviews. Without their support, this workshop would not have been possible. In addition, we thank all authors for submitting papers and making PEOPLES a big success. Also thanks to our invited speaker, Saif M. Mohammad (NRC, Canada), for having accepted to come to the workshop and share his expertise and ideas on PEOPLES’ topics. We thank COLING for hosting us, and in particular the local organizers for their exceptional support, especially when having to deal, logistically, with an unexpectedly high number of submissions and participants to our workshop. Lastly, we are extremely grateful to our sponsors, CELI Language Technologies, and the Computational Linguistics group of the University of Groningen for their financial support, without which this workshop would not have gone through.

We look forward to welcoming you all at PEOPLES 2016 in Osaka, Japan!

Malvina, Viviana, Barbara

PEOPLES
<https://peoples2016.github.io/>

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PEOPLES 2016 is organized with the support of CELI Language Technology (<https://www.celi.it/en/>) and the Computational Linguistics group of CLCG (<http://www.rug.nl/research/clcg/>), University of Groningen.



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 groningen**

Keynote

Affect Associations in Creative Language

Saif M. Mohammad

NRC, Canada

Abstract: Beyond literal meaning, words have associations with sentiment, emotion, colour, and even music. Such affect associations are particularly salient in overtly creative instances of language, such as stories and poems. They are also found in implicitly creative day-to-day formulations such as metaphors, hashtags, and opposing polarity phrases (phrases made of one positive word and one negative word). I will first present methods that capture affect associations of words, phrases, and metaphoric expressions. Then I will show how these associations can be used for sentiment analysis of tweets, understanding semantic composition, determining the mechanisms underpinning metaphor, detecting personality traits, analyzing stories, and even generating music from novels.

Bio: Dr. Saif M. Mohammad is Senior Research Officer at the National Research Council Canada (NRC). He received his Ph.D. in Computer Science from the University of Toronto. His primary research interest is in Computational Linguistics, especially Lexical Semantics, Sentiment Analysis, Crowd Annotations, Computational Studies of Literature, and Information Visualization. His team developed a system that ranked first in recent SemEval shared tasks on the sentiment analysis of tweets and on aspect-based sentiment analysis. His word-emotion association resource, the NRC Emotion Lexicon, is widely used for text analysis and information visualization. His work on detecting emotions in social media and on generating music from text have garnered widespread media attention, including articles in Time, Slashdot, LiveScience, io9, The Physics arXiv Blog, PC World, and Popular Science. (Website: <http://saifmohammad.com>)

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Conference Program

December 12, 2016

12:30–12:35 **Opening**

12:35–13:35 **Oral session 1: Gender, Emotion, Personality**

Zooming in on Gender Differences in Social Media

Aparna Garimella and Rada Mihalcea

The Effect of Gender and Age Differences on the Recognition of Emotions from Facial Expressions

Daniela Schneevogt and Patrizia Paggio

A Recurrent and Compositional Model for Personality Trait Recognition from Short Texts

Fei Liu, Julien Perez and Scott Nowson

Distant supervision for emotion detection using Facebook reactions

Chris Pool and Malvina Nissim

13:35–13:55 **Coffee break**

13:55–14:45 **Keynote**

Affect Associations in Creative Language

Saif M. Mohammad

December 12, 2016 (continued)

14:45–15:45 Posters and coffee

A graphical framework to detect and categorize diverse opinions from online news

Ankan Mullick, Pawan Goyal and Niloy Ganguly

Active learning for detection of stance components

Maria Skeppstedt, Magnus Sahlgren, Carita Paradis and Andreas Kerren

Detecting Opinion Polarities using Kernel Methods

Rasoul Kaljahi and Jennifer Foster

Effects of Semantic Relatedness between Setups and Punchlines in Twitter Hashtag Games

Andrew Cattle and Xiaojuan Ma

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Lea Canales, Carlo Strapparava, Ester Boldrini and Patricio Martinez-Barco

Personality Estimation from Japanese Text

Koichi Kamijo, Tetsuya Nasukawa and Hideya Kitamura

Predicting Brexit: Classifying Agreement is Better than Sentiment and Pollsters

Fabio Celli, Evgeny Stepanov, Massimo Poesio and Giuseppe Riccardi

Sarcasm Detection : Building a Contextual Hierarchy

Taradheesh Bali and Navjyoti Singh

Social and linguistic behavior and its correlation to trait empathy

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The Challenges of Multi-dimensional Sentiment Analysis Across Languages

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The Social Mood of News: Self-reported Annotations to Design Automatic Mood Detection Systems

Firoj Alam, Fabio Celli, Evgeny A. Stepanov, Arindam Ghosh and Giuseppe Riccardi

December 12, 2016 (continued)

15:45–16:45 Oral session 2: Affect in interaction, Speech, Well-being

Microblog Emotion Classification by Computing Similarity in Text, Time, and Space

Anja Summa, Bernd Resch and Michael Strube

A domain-agnostic approach for opinion prediction on speech

Pedro Bispo Santos, Lisa Beinborn and Iryna Gurevych

Can We Make Computers Laugh at Talks?

Chong Min Lee, Su-Youn Yoon and Lei Chen

Towards Automatically Classifying Depressive Symptoms from Twitter Data for Population Health

Danielle L Mowery, Albert Park, Craig Bryan and Mike Conway

16:45–17:00 Wrap-up

CELI (sponsor)

Andrea Bolioli

