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X-SENTIMENT 2021

Sixth International Workshop on eXplainable SEN-TIment Mining and EmotioN deTection

Hersonissos, Greece, June 7 2021 - moved online

Proceedings

Volume Editors

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Preface

The Sixth International Workshop on eXplainable SENTIment Mining and EmotioN deTection (X-SENTIMENT 2021)[1] was held as part of the 18th Extended Semantic Web Conference on June 7, 2021. X-SENTIMENT 2021 was expected to happen in Hersonissos, Greece, but due to the COVID-19 emergency and the consequent travel restrictions, the workshop was held online. During the years, the workshop around the Sentiment Analysis and Emotion Detection topics changed its title based on the emphasis it was decided to give to timely research interests of the community [3, 2, 1, 4][2]. The workshop was jointly organized by the University of Paris 13 (France), by FIZ Karlsruhe – Leibniz Institute for Information Infrastructure & Karlsruhe Institute of Technology (Germany), by the Fondazione Bruno Kessler (Italy), and by the University of Cagliari (Italy).

The workshop collected novel, original research on the state of the art of explainability targeting sentiment analysis and emotion detection empowered with Natural Language Processing (NLP), Knowledge Graphs (KGs), and Machine Learning (ML), providing a common ground for researchers, practitioners, and stakeholders working in this area. The workshop day included three paper presentations and a keynote talk to highlight open issues, research challenges, and future research directions. More than 20 participants were registered and attended the workshop.

Overall, 5 submissions from different countries were received. The final program included 3 full papers. All submissions were peer-reviewed by at least three internal Program Committee members on the basis of relevance for the workshop, novelty/originality, significance, technical quality and correctness, quality and clarity of presentation, quality of references and reproducibility, to ensure that only submissions of high quality were included in the workshop program. Authors were given 20 minutes to present their work, with 5 minutes for questions and answers. The presentations covered topics that span from the use of NLP patterns to explain and interpret sentiment in the financial domain to the adoption of symbolic AI.

In addition to the paper presentations, the program included a 55-min keynote talk given by Prof. Erik Cambria from the Nanyang Technological University (NTU), Singapore. Prof. Cambria introduced the challenges that we are facing within the detection and explanations of sentiments such as the lack of transparency, traceability, and explainability on how the decisions are taken, thus limiting human-comprehensible solutions, and reducing the trust towards machine generated results.

Overall, the workshop was a successful event, as shown by the level of participation and the quality of the contributions during the presentations and the engagement of participants in the discussions. We believe that this workshop

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[1] https://danilo-dessi.github.io/xsentiment/
[2] we did not publish the proceedings of the fifth edition of the workshop.

helped to strengthen the community working on sentiment analysis and emotion detection, highlighting the current challenges, in particular regarding explainability, promoting discussions on ideas and solutions for these challenges, and also favouring the creation of networks of researchers for future initiatives related to these topics. There are already plans to organize the seventh edition of the workshop. The organizers would like to sincerely thank the main conference organizers, the keynote speaker, the paper authors, the programme committee, and the attendees for their valuable contribution to make this workshop a successful event.

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References

1. Mauro Dragoni and Diego Reforgiato Recupero, editors. *Proceedings of the 3rd International Workshop at ESWC on Emotions, Modality, Sentiment Analysis and the Semantic Web co-located with 14th ESWC 2017, Portroz, Slovenia, May 28, 2017*, volume 1874 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2017.
2. Mauro Dragoni, Diego Reforgiato Recupero, Kerstin Denecke, Yihan Deng, and Thierry Declerck, editors. *Joint Proceedings of the 2th Workshop on Emotions, Modality, Sentiment Analysis and the Semantic Web and the 1st International Workshop on Extraction and Processing of Rich Semantics from Medical Texts co-located with ESWC 2016, Heraklion, Greece, May 29, 2016*, volume 1613 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2016.
3. Aldo Gangemi, Harith Alani, Malvina Nissim, Erik Cambria, Diego Reforgiato Recupero, Vitaveska Lanfranchi, and Tomi Kauppinen, editors. *Joint Proceedings of the 1th Workshop on Semantic Sentiment Analysis (SSA2014), and the Workshop on Social Media and Linked Data for Emergency Response (SMILE 2014) co-located with 11th European Semantic Web Conference (ESWC 2014), Crete, Greece, May 25th, 2014*, volume 1329 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2015.
4. Diego Reforgiato Recupero, Mauro Dragoni, Davide Buscaldi, Mehwish Alam, and Erik Cambria, editors. *Proceedings of 4th Workshop on Sentic Computing, Sentiment Analysis, Opinion Mining, and Emotion Detection (EMSASW 2018) Co-located with the 15th Extended Semantic Web Conference 2018 (ESWC 2018), Heraklion, Greece, June 4, 2018*, volume 2111 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2018.