

WOAH 2021

The 5th Workshop on Online Abuse and Harms

Proceedings of the Workshop

August 6, 2021
Bangkok, Thailand (online)

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Message from the Organisers

Digital technologies have brought myriad benefits for society, transforming how people connect, communicate and interact with each other. However, they have also enabled harmful and abusive behaviours to reach large audiences and for their negative effects to be amplified, including interpersonal aggression, bullying and hate speech. Already marginalised and vulnerable communities are often disproportionately at risk of receiving such abuse, compounding other social inequalities and injustices. The Workshop on Online Abuse and Harms (WOAH) convenes research into these issues, particularly work that develops, interrogates and applies computational methods for detecting, classifying and modelling online abuse.

Technical disciplines such as machine learning and natural language processing (NLP) have made substantial advances in creating more powerful technologies to stop online abuse. Yet a growing body of work shows the limitations of many automated detection systems for tackling abusive online content, which can be biased, brittle, low performing and simplistic. These issues are magnified by the lack of explainability and transparency. And although WOAHA is collocated with ACL and many of our papers are rooted firmly in the field of machine learning, these are not purely engineering challenges, but raise fundamental social questions of fairness and harm. For this reason, we continue to emphasise the need for inter-, cross- and anti- disciplinary work by inviting contributions from a range of fields, including but not limited to: NLP, machine learning, computational social sciences, law, politics, psychology, network analysis, sociology and cultural studies. In this fifth edition of WOAHA we direct the conversation at the workshop through our theme: Social Bias and Unfairness in Online Abuse Detection Systems. Continuing the tradition started in WOAHA 4, we have invited civil society, in particular individuals and organisations working with women and marginalised communities, to submit reports, case studies, findings, data, and to record their lived experiences through our civil society track. Our hope is that WOAHA provides a platform to facilitate the interdisciplinary conversations and collaborations that are needed to effectively and ethically address online abuse.

Speaking to the complex nature of the issue of online abuse, we are pleased to invite Leon Derczynski, currently an Associate Professor at ITU Copenhagen who works on a range of topics in Natural Language Processing; Deb Raji, currently a Research Fellow at Mozilla who researches AI accountability and auditing; Murali Shanmugavelan, currently a researcher at the Centre for Global Media and Communications at SOAS (London) to deliver keynotes. We are grateful to all our speakers for being available, and look forward to the dialogues that they will generate. On the day of WOAHA the invited keynote speakers will give talks and then take part in a multi-disciplinary panel discussion to debate our theme and other issues in computational online abuse research. This will be followed by paper Q&A sessions, with facilitated discussions. Due to the virtual nature of this edition of the workshop, we have gathered papers into thematic panels to allow for more in-depth and rounded discussions.

In this edition of the workshop, we introduce our first official Shared Task for fine-grained detection of hateful memes, in recognition of the ever-growing complexity of human communication. Memes and their communicative intent can be understood by humans because we jointly understand the text and pictures. In contrast, most AI systems analyze text and image separately and do not learn a joint representation. This is both inefficient and flawed, and such systems are likely to fail when a non-hateful image is combined with non-hateful text to produce content that is nonetheless still hateful. For AI to detect this sort of hate it must learn to understand content the way that people do: holistically.

Continuing the success of past editions of the workshop, we received 48 submissions. Following a rigorous review process, we selected 24 submissions to be presented at the workshop. These include 13 long papers, 7 short papers, 3 shared-task system descriptions, and 1 extended abstract. The accepted papers cover a wide array of topics: Understanding the dynamics and nature of online abuse; BERTology: transformer-based modelling of online abuse; Datasets and language resources for online abuse; Fairness, bias and understandability of models; Analysing models to improve real-world performance; Resources for non-English languages. We are hugely excited about the discussions which will take place around these works. We are grateful to everyone who submitted their research and to our excellent team of reviewers.

With this, we welcome you to the Fifth Workshop on Online Abuse and Harms. We look forward to a day filled with spirited discussion and thought provoking research!

Aida, Bertie, Douwe, Lambert, Vinod and Zeerak.

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Aleš Završnik, Institute of criminology at the Faculty of Law Ljubljana (Slovenia)
Torsten Zesch, "Language Technology Lab, University of Duisburg-Essen" (Germany)

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15:10–15:40 **Keynote Session I**

15:10–15:55 *Keynote I*
Leon Derczynski

15:55–16:40 *Keynote II*
Murali Shanmugavelan

16:40–16:45 *Break*

16:45–18:10 **Paper Presentations**

16:45–17:10 *1-Minute Paper Storm*

17:10–17:40 **Paper Q & A Panels I**

17:10–17:40 *BERTology: transformer-based modelling of online abuse*

Exploiting Auxiliary Data for Offensive Language Detection with Bidirectional Transformers

Sumer Singh and Sheng Li

Modeling Profanity and Hate Speech in Social Media with Semantic Subspaces

Vanessa Hahn, Dana Ruitter, Thomas Kleinbauer and Dietrich Klakow

HateBERT: Retraining BERT for Abusive Language Detection in English

Tommaso Caselli, Valerio Basile, Jelena Mitrović and Michael Granitzer

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[Findings] Generate, Prune, Select: A Pipeline for Counterspeech Generation against Online Hate Speech
Wanzheng Zhu, Suma Bhat

17:10–17:40 *Analysing models to improve real-world performance*

Multi-Annotator Modeling to Encode Diverse Perspectives in Hate Speech Annotations

Aida Mostafazadeh Davani, Mark Díaz and Vinodkumar Prabhakaran

Memes in the Wild: Assessing the Generalizability of the Hateful Memes Challenge Dataset

Hannah Kirk, Yennie Jun, Paulius Rauba, Gal Wachtel, Ruining Li, Xingjian Bai, Noah Broestl, Martin Doff-Sotta, Aleksandar Shtedritski and Yuki M Asano

Measuring and Improving Model-Moderator Collaboration using Uncertainty Estimation

Ian Kivlichan, Zi Lin, Jeremiah Liu and Lucy Vasserman

[Findings] Detecting Harmful Memes and Their Targets

Shraman Pramanick, Dimitar Dimitrov, Rituparna Mukherjee, Shivam Sharma, Md. Shad Akhtar, Preslav Nakov, Tanmoy Chakraborty

[Findings] Survival text regression for time-to-event prediction in conversations

Christine De Kock, Andreas Vlachos

17:40–18:10 *Resources for non-English languages*

DALC: the Dutch Abusive Language Corpus

Tommaso Caselli, Arjan Schelhaas, Marieke Weultjes, Folkert Leistra, Hylke van der Veen, Gerben Timmerman and Malvina Nissim

Offensive Language Detection in Nepali Social Media

Nobal B. Niraula, Saurab Dulal and Diwa Koirala

MIN_PT: An European Portuguese Lexicon for Minorities Related Terms

Paula Fortuna, Vanessa Cortez, Miguel Sozinho Ramalho and Laura Pérez-Mayos

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17:40–18:10 *Fairness, bias and understandability of models*

Fine-Grained Fairness Analysis of Abusive Language Detection Systems with CheckList

Marta Marchiori Manerba and Sara Tonelli

Improving Counterfactual Generation for Fair Hate Speech Detection

Aida Mostafazadeh Davani, Ali Omrani, Brendan Kennedy, Mohammad Atari, Xiang Ren and Morteza Dehghani

Hell Hath No Fury? Correcting Bias in the NRC Emotion Lexicon

Samira Zad, Joshuan Jimenez and Mark Finlayson

Mitigating Biases in Toxic Language Detection through Invariant Rationalization

Yung-Sung Chuang, Mingye Gao, Hongyin Luo, James Glass, Hung-yi Lee, Yun-Nung Chen and Shang-Wen Li

Fine-grained Classification of Political Bias in German News: A Data Set and Initial Experiments

Dmitrii Aksenov, Peter Bourgonje, Karolina Zaczynska, Malte Ostendorff, Julian Moreno-Schneider and Georg Rehm

17:40–18:10 *Datasets and language resources for online abuse*

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Julian Risch, Philipp Schmidt and Ralf Krestel

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[Findings] CONDA: a CONtextual Dual-Annotated dataset for in-game toxicity understanding and detection

Henry Weld, Guanghao Huang, Jean Lee, Tongshu Zhang, Kunze Wang, Xinghong Guo, Siqu Long, Josiah Poon, Soyeon Caren Han

17:40–18:10 *Understanding the dynamics and nature of online abuse*

When the Echo Chamber Shatters: Examining the Use of Community-Specific Language Post-Subreddit Ban

Milo Trujillo, Sam Rosenblatt, Guillermo de Anda Jáuregui, Emily Moog, Briane Paul V. Samson, Laurent Hébert-Dufresne and Allison M. Roth

Targets and Aspects in Social Media Hate Speech

Alexander Shvets, Paula Fortuna, Juan Soler and Leo Wanner

Abusive Language on Social Media Through the Legal Looking Glass

Thales Bertaglia, Andreea Grigoriu, Michel Dumontier and Gijs van Dijck

18:10–18:20 *Break*

18:20–19:00 *Multi-Word Expressions and Online Abuse Panel*

19:00–19:15 *Break*

19:15–19:45 **Keynote Session II**

19:15–20:00 *Keynote III*
Deb Raji

20:00–20:45 *Keynote Panel*
Deb Raji, Murali Shanmugavelan, Leon Derczynski

20:45–21:00 *Break*

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21:00–21:45 Shared Task Session

Findings of the WOAHS 5 Shared Task on Fine Grained Hateful Memes Detection

Lambert Mathias, Shaoliang Nie, Aida Mostafazadeh Davani, Douwe Kiela, Vinodkumar Prabhakaran, Bertie Vidgen and Zeerak Waseem

VL-BERT+: Detecting Protected Groups in Hateful Multimodal Memes

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Multimodal or Text? Retrieval or BERT? Benchmarking Classifiers for the Shared Task on Hateful Memes

Vasiliki Kougia and John Pavlopoulos

21:45–22:00 Closing Remarks

