

2nd International Workshop on Rumours and Deception in Social Media: Preface

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Abstract

This preface introduces the proceedings of the 2nd International Workshop on Rumours and Deception in Social Media (RDSM'18), co-located with CIKM 2018 in Turin, Italy.

1 Introduction

Social media is an excellent resource for mining all kinds of information, varying from opinions to actual facts. However, not all information in social media posts is reliable [ZAB⁺18] and thus their truth value can often be questionable. One such category of information types is rumours where the veracity level is not known at the time of posting. Some rumours are true, but many of them are false, and the deliberate fabrication and propagation of false rumours can be a powerful tool for the manipulation of public opinion. It is therefore very important to be able to detect and provide verification of false rumours before they spread widely and influence public opinion. In this workshop the aim is to bring together researchers and practitioners interested in social media mining and analysis to deal with the emerging issues of rumour veracity assessment and their use in the manipulation of public opinion.

The 2nd edition of the RDSM workshop took place in Turin, Italy in October 2018, co-located with CIKM 2018. It was organised with the aim of focusing particularly on online *information disorder* and its interplay

with public opinion formation. Information disorder has been categorised into three types [WD17]: (1) misinformation, an honest mistake in information sharing, (2) disinformation, deliberate spreading of inaccurate information, and (3) malinformation, accurate information that is intended to harm others, such as leaks.

2 Accepted papers

The workshop received 17 submissions from multiple countries, of which 10 (58.9%) were ultimately accepted for inclusion in these proceedings and presentation at the workshop:

- Kefato et al. [KSB⁺18] propose a fully network-agnostic approach called CaTS that models the early spread of posts (i.e., cascades) as time series and predicts their virality.
- Caled and Silva [CS18] describe ongoing work on the creation of a multilingual rumour dataset on football transfer news, FTR-18.
- Yao and Hauptmann [YH18a] analyse the power of the crowd for checking the veracity of rumours, which they formulate as a reviewer selection problem. Their work aims to find reliable reviewers for a particular rumour.
- Yang and Yu [YY18] propose a reinforcement learning framework that aims to incorporate interpersonal deception theories to fight against social engineering attacks.
- Conforti et al. [CPC18] propose a simple architecture for stance detection based on conditional encoding, carefully designed to model the internal

structure of a news article and its relations with a claim.

- Roitero et al. [RDMS18] report on collecting truthfulness values (i) by means of crowdsourcing and (ii) using fine-grained scales. They collect truthfulness values using a bounded and discrete scale with 100 levels as well as a magnitude estimation scale, which is unbounded, continuous and has infinite amount of levels.
- Skorniakov et al. [STZ18] describe an approach to the detection of social bots using a stacking based ensemble, which exploits text and graph features.
- Caetano et al. [CMC⁺18] investigate the public perception of WhatsApp through the lens of media. They analyse two large datasets of news and show the kind of content that is being associated with WhatsApp in different regions of the world and over time.
- Pamungkas et al. [PBP18] describe an approach to stance classification, which leverages conversation-based and affective-based features, covering different facets of affect.
- Yao and Hauptmann [YH18b] analyse a publicly available dataset of Russian trolls. They analyse tweeting patterns over time, revealing that these accounts differ from traditional bots and raise new challenges for bot detection methods.

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References

- [CMC⁺18] Josemar Alves Caetano, Gabriel Magno, Evandro Cunha, Wagner Meira Jr., Humberto T. Marques-Neto, and Virgilio Almeida. Characterizing the public perception of whatsapp through the lens of media. In *Proc. of 2nd RDSM*, 2018.
- [CPC18] Costanza Conforti, Mohammad Taher Pilehvar, and Nigel Collier. Modeling the fake news challenge as a cross-level stance detection task. In *Proc. of 2nd RDSM*, 2018.
- [CS18] Danielle Caled and Mário J. Silva. Ftr-18: Collecting rumours on football transfer news. In *Proc. of 2nd RDSM*, 2018.
- [KSB⁺18] Zekarias T. Kefato, Nasrullah Sheikh, Leila Bahri, Amira Soliman, Alberto Montresor, and Sarunas Girdzijauskas. Cats: Network-agnostic virality prediction model to aid rumour detection. In *Proc. of 2nd RDSM*, 2018.
- [PBP18] Endang Wahyu Pamungkas, Valerio Basile, and Viviana Patti. Stance classification for rumour analysis in twitter: Exploiting affective information and conversation structure. In *Proc. of 2nd RDSM*, 2018.
- [RDMS18] Kevin Roitero, Gianluca Demartini, Stefano Mizzaro, and Damiano Spina. How many truth levels? six? one hundred? even more? validating truthfulness of statements via crowdsourcing. In *Proc. of 2nd RDSM*, 2018.
- [STZ18] Kirill Skorniakov, Denis Turdakov, and Andrey Zhabotinsky. Make social networks clean again: Graph embedding and stacking classifiers for bot detection. In *Proc. of 2nd RDSM*, 2018.
- [WD17] Claire Wardle and Hossein Derakhshan. Information disorder: Toward an interdisciplinary framework for research and policymaking. *Council of Europe report, DGI (2017)*, 9, 2017.
- [YH18a] Jianan Yao and Alexander G. Hauptmann. Reviewer selection for rumor checking on social media. In *Proc. of 2nd RDSM*, 2018.
- [YH18b] Jianan Yao and Alexander G. Hauptmann. Temporal patterns of russian trolls: A case study. In *Proc. of 2nd RDSM*, 2018.
- [YY18] Grace Hui Yang and Yue Yu. Use of interpersonal deception theory in counter social engineering. In *Proc. of 2nd RDSM*, 2018.
- [ZAB⁺18] Arkaitz Zubiaga, Ahmet Aker, Kalina Bontcheva, Maria Liakata, and Rob Procter. Detection and resolution of rumours in social media: A survey. *ACM Computing Surveys (CSUR)*, 51(2):32, 2018.