

Data Science in Societal Debates

DSSD 2017

Special Session held in conjunction with

The 4th IEEE International Conference on Data Science and Advanced Analytics (DSAA 2017)

Tokyo, Japan, 19-21 October, 2017

<http://www.dslab.it.aoyama.ac.jp/dsaa2017/>

About DSAA

The International Conference on Data Science and Advanced Analytics (DSAA) started in 2014 aiming to be a flagship in the data science and analytics field. It provides a premier forum that brings together researchers, industry practitioners, as well as potential users of data science and big data analytics. It covers all data science and analytics related areas, including statistical, probabilistic and mathematical methods, machine learning, data and business analytics, data mining and knowledge discovery, infrastructure, storage, retrieval and search, privacy and security, and relevant applications, practices, tools and evaluation. Starting from 2015, DSAA is a fully IEEE CIS supported conference. DSAA is also technically sponsored by ACM through SIGKDD, and by the American Statistical Association (ASA).

Aims and scope

Nowadays, social media platforms, online blogs, and discussion forums are a crucial component in the public sphere, fostering discussions and influencing the public perception for a myriads of social issues such as politics, security, climate, health, economics, migration, to name but a few. On the one hand, this represents an unprecedented opportunity to discuss and propose new ideas, giving voice to the crowds. On the other hand however, new socio-technical issues arise, which are related to the discussion of such controversial topics. Among the most pressing issues in online societal debates, is the formation of so-called "echo chambers", i.e., situations where polarized like-minded people reinforce each other's opinion, but do not get exposed to the views of the opposing side. Echo chambers have a negative effect on society since polarized communities tend to get isolated and only marginally exposed to unbiased information. As a result, people belonging to echo chambers are more likely to incur in extremization and hate. Unfortunately, misinformation is present also outside of echo chambers. Indeed, rumor spreading, fake news, and hoaxes are another major issue of all controversial social discussions, where people try to influence the opposing side with questionable means. Misinformation and political campaigns are sometimes also carried out by groups of automated accounts that pollute and tamper the social environment by injecting a large number of targeted messages.

This special session focuses on data science approaches to study, model, characterize, and propose solutions to these, and other similar, challenges related to all aspects of polarized, political, and controversial societal debates.

Topics of interest

Areas of interest to DSSD 2017 include, but are not limited to:

Methods and Techniques:

- Modeling of online societal debates;
- Modeling influence and influencers in societal debates;
- Monitoring discussion topics across time and space;
- Text analytics for sentiment analysis and opinion mining;
- Graph mining and network analysis for studying polarized communities;
- Modeling the spread of misinformation, rumors, fake news, hoaxes;
- Data-driven methods and techniques for detecting misinformation;
- Data-driven methods and techniques for detecting malicious, polluting, and tampering accounts.

Applications of data science methods and techniques to:

- Reduce polarization in online communities;
- Enforce social networks security and trust;
- Detect misinformation and malicious accounts in online communities;
- Detect and prevent extremization and hate in online discussions.

Submission

Paper submission to the DSSD 2017 special session follows the same rules of the DSAA17 main conference. Papers should be limited to a maximum of ten (10) pages, in the IEEE 2-column format. All submissions should be prepared for Double Blind reviewing. That is, neither the reviewers are revealed nor the author information is to be disclosed. For further instructions please refer to the Submission page of DSAA17: <http://www.dslab.it.aoyama.ac.jp/dsaa2017/submission/>

Papers should be submitted through the EasyChair Conference System:

<https://easychair.org/conferences/?conf=dsaa2017>

Please, select the "Special Session on Data Science in Societal Debates" after logging in.

Important dates

Submission: May 25, 2017

Notification: July 25, 2017

Camera ready: Aug 15, 2017

Conference: Oct 19-21, 2017

Publication

All accepted papers will be published by IEEE and included in the IEEE Xplore Digital Library. The conference proceedings will be submitted for EI indexing through INSPEC by IEEE. Selected top quality papers will be invited to submit to International Journal of Data Science and Analytics (Springer), IEEE Intelligent Systems, WWWJ (Springer), and IEEE Neurocomputing.

Chairs

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