Call for Papers for a Special Section on
# *Argumentation in Social Media*
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**ACM Transactions on Internet Technology**

## Special Section Editors

Iryna Gurevych
UKP Lab, TU Darmstadt
*gurevych@ukp.informatik.tu-darmstadt.de*

Marco Lippi
DISI, University of Bologna
*marco.lippi3@unibo.it*

Paolo Torroni
DISI, University of Bologna
*paolo.torroni@unibo.it*

## Contact

*asmtoit@gmail.com*

## Important Dates

Submissions:            **15 January 2016**
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Final submissions:      14 October 2016
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## Submission

http://toit.acm.org/submission.html

Please select "Special Section: Argumentation in Social Media" under Manuscript Type dropdown in the Manuscript Central website.

Submissions should be in the ACM Transactions style, and limited to **20 pages**. Authors should adhere to the submission instructions and editorial policies described at http://toit.acm.org/submission.html

Argumentation is a rapidly expanding multidisciplinary research area at the confluence of diverse fields such as philosophy, communication studies, logic and artificial intelligence, computational linguistics, social sciences, political sciences, and law. The contributions coming from these heterogeneous disciplines and the large number of potential applications that can be triggered by these studies have made argumentation one of the hottest topics within the artificial intelligence community with immediate relevance to the Web, distributed computing, and mobile systems.

The Internet and the Web have inspired a variety of real-world applications for argumentation, since social media, social networks, and distributed platforms are some of the favorite sources and outlets for opinions, advice, and comments of any sort for a large share of the world population, and this type of content could very well lend itself to argumentative analysis. However, current argumentative analysis methodologies are costly and pose clear issues of scalability, since they are mainly manual or only semi-automated, and they require a great deal of expertise. Indeed, current text-based social media analytics mainly focuses on approaches such as sentiment analysis, and does not yet consider argument analysis. Sentiment analysis lets us analyze the users' opinions about certain topics, but falls short of identifying the reasons for the opinions expressed and the users' chains and patterns of reasoning.

Recently we have observed tremendous interest and rapid expansion of argumentation mining -- the process of automatically extracting arguments from unstructured text -- as a means of filling this gap. Developing enabling platforms for formal and informal argumentation in distributed settings, mining dynamic natural language text, managing consistency and accuracy in data representation, and information presentation and visualization at large are very important and certainly challenging domains for argumentation mining. Social networks and social media in particular provide high-throughput, highly heterogeneous and highly dynamic sources of data, which are likely to include significant argumentative content. With argumentation mining, the potential behind the combination of social media and argumentation studies has grown, encompassing domains such as social issues and public policy, with applications ranging from the analysis of the dynamics of social debates on the Web to the detection of anomalous behavior; and from the study of how influential arguments spread and become dominant within social networks to the role of specific users within this kind of process.

The aim of this TOIT special section is to address the important challenges that argumentation in the Web poses, involving the perspective of distributed computing. These include, but are not limited to, the development of algorithms and architectures for mining large volumes of highly dynamic unstructured or semi-structured data especially natural language text coming from social media; the definition of appropriate models and structures that enable processing and visualizing such data; the privacy, trust, legal, and ethical issues related to the management and processing of user-generated argumentative content; the development of enabling platforms for formal and informal argumentation in distributed and agent-based environments; the management of consistent and accurate data representations; the novel use of resources such as ontologies and vocabulary systems; and the presentation of large, complex, community-based argumentative content in a usable way.

A list of **topics** to be covered by this special section includes, but is not limited to a set of areas listed below.

**Foundations**
- Information models of user-generated arguments and debate in social media
- Argumentation-enabled collective intelligence and collaboration
- Security, privacy, trust, and ethical issues related to argumentative analysis

**Methods and technologies**
- Mining and visualization of large volumes of highly dynamic data
- Argumentation and social informatics, social computing, and crowdsourcing
- Innovative semantic search methods, algorithms, and tools
- Middleware and APIs for online debating technologies

**Applications**
- Argumentation mining in social media
- Processing of user reviews for online entertainment, e-commerce, and e-business applications
- Argumentation for e-learning
- Argumentation analysis for policy making
- Argumentation and online debates and mining for e-government

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