

EMNLP 2018

**Proceedings of the
5th Workshop on Argument Mining**

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Introduction

Argument mining (also, “argumentation mining”) is a relatively new research field within the rapidly evolving area of Computational Argumentation. The tasks pursued within this field are highly challenging with many important practical applications. These include automatically identifying argumentative structures within discourse, e.g., premises, conclusion, and argumentation scheme of each argument, as well as relationships between pairs of arguments and their components. To date, researchers have investigated a plethora of methods to address these tasks in various areas, including legal documents, user generated Web discourse, on-line debates, product reviews, academic literature, newspaper articles, dialogical domains, and Wikipedia articles. Relevant manually annotated corpora are released at an increasing pace, further enhancing the research in the field. In addition, argument mining is inherently tied to sentiment analysis, since an argument frequently carries a clear sentiment towards its topic. Correspondingly, this year’s workshop will be coordinated with the corresponding WASSA workshop, aiming to have a joint poster session.

Argument mining can give rise to various applications of great practical importance. For instance, by developing methods that can extract and visualize the main pro and con arguments raised in a collection of documents towards a query of interest, one can enhance data-driven decision making. In instructional contexts, argumentation is a pedagogically important tool for conveying and assessing the students’ command of course material, as well as for advancing critical thinking. Written and diagrammed arguments by students represent educational data that can be mined for purposes of assessment and instruction. This is especially important given the wide-spread adoption of computer-supported peer review, computerized essay grading, and large-scale online courses and MOOCs. Additionally, mining pros and cons may be useful in multiple business applications, for instance, for researching a company or considering the potential of a possible investment.

Success in argument mining requires interdisciplinary approaches informed by natural language processing technology, artificial intelligence approaches, theories of semantics, pragmatics and discourse, knowledge of discourse of domains such as law and science, argumentation theory, computational models of argumentation, and cognitive psychology. The goal of this workshop is to provide a follow-on forum to the last four years’ Argument Mining workshops at ACL and EMNLP, the major research forum devoted to argument mining in all domains of discourse.

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Ranit Aharonov, IBM Research AI (chair)
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Claire Cardie, Cornell University
Nancy Green, University of North Carolina Greensboro
Iryna Gurevych, Technische Universität Darmstadt
Ivan Habernal, Technische Universität Darmstadt
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Henning Wachsmuth, Bauhaus-Universität Weimar
Zhongyu Wei, Fudan University

Invited Speaker:

Hugo Mercier, Institut Jean Nicod, CNRS

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Conference Program

Thursday, November 1, 2018

09:00–09:10 **Openings**

Session 1

09:10–10:10 *Keynote Talk: Argumentation and Human Reason*
Hugo Mercier

10:10–10:30 *Argumentative Link Prediction using Residual Networks and Multi-Objective Learning*
Andrea Galassi, Marco Lippi and Paolo Torrioni

10:30–11:00 ***Coffee Break***

Session 2

11:00–11:20 *End-to-End Argument Mining for Discussion Threads Based on Parallel Constrained Pointer Architecture*
Gaku Morio and Katsuhide Fujita

11:20–11:40 *ArguminSci: A Tool for Analyzing Argumentation and Rhetorical Aspects in Scientific Writing*
Anne Lauscher, Goran Glavaš and Kai Eckert

11:40–12:00 *Evidence Type Classification in Randomized Controlled Trials*
Tobias Mayer, Elena Cabrio and Serena Villata

12:00–12:20 *Predicting the Usefulness of Amazon Reviews Using Off-The-Shelf Argumentation Mining*
Marco Passon, Marco Lippi, Giuseppe Serra and Carlo Tasso

12:20–14:30 ***Lunch and Poster Presentations***

An Argument-Annotated Corpus of Scientific Publications
Anne Lauscher, Goran Glavaš and Simone Paolo Ponzetto

Thursday, November 1, 2018 (continued)

Annotating Claims in the Vaccination Debate

Benedetta Torsi and Roser Morante

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Evidence Types, Credibility Factors, and Patterns or Soft Rules for Weighing Conflicting Evidence: Argument Mining in the Context of Legal Rules Governing Evidence Assessment

Vern R. Walker, Dina Foerster, Julia Monica Ponce and Matthew Rosen

Feasible Annotation Scheme for Capturing Policy Argument Reasoning using Argument Templates

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Proposed Method for Annotation of Scientific Arguments in Terms of Semantic Relations and Argument Schemes

Nancy Green

Using context to identify the language of face-saving

Nona Naderi and Graeme Hirst

Thursday, November 1, 2018 (continued)

Session 3

14:30–15:10 *Special Presentation: Project Debater*

Noam Slonim and Ranit Aharonov

15:10–15:30 *Dave the debater: a retrieval-based and generative argumentative dialogue agent*

Dieu-Thu Le, Cam Tu Nguyen and Kim Anh Nguyen

15:30–16:00 *Coffee Break*

Session 4

16:00–16:20 *PD3: Better Low-Resource Cross-Lingual Transfer By Combining Direct Transfer and Annotation Projection*

Steffen Eger, Andreas Rücklé and Iryna Gurevych

16:20–16:40 *Cross-Lingual Argumentative Relation Identification: from English to Portuguese*

Gil Rocha, Christian Stab, Henrique Lopes Cardoso and Iryna Gurevych

16:40–17:00 *More or less controlled elicitation of argumentative text: Enlarging a microtext corpus via crowdsourcing*

Maria Skeppstedt, Andreas Peldszus and Manfred Stede

17:00–17:30 *Best paper announcement and closing*

