# ACL 2016

# The 54th Annual Meeting of the Association for Computational Linguistics

## **Proceedings of the 3rd Workshop on Argument Mining**

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## Preface

This third edition of the Workshop on Argument Mining builds on the success of the first and second workshops held at ACL 2014 and NAACL 2015, with an increasing maturity in the work reported. The breadth of papers in the programme this year attests to the range of techniques, the diverse domains and the varied goals that are encompassed in argument (or argumentation) mining.

The focus of argument mining is to tackle the problem of automatic identification of arguments and their internal structure and interconnections. The papers collected here provide a rich exploration of the nature of argumentative structure that can be automatically identified, from identification of the presence of argument, through evidence relationships and types of evidence relationships, argument types and premise types, to highly demanding tasks such as enthymeme reconstruction.

One of the facets that makes argument mining such an exciting and demanding problem is that purely statistical approaches very rapidly reach performance maxima with more knowledge-intensive, linguistically-aware and structurally constrained approaches required as well. Combinations of statistical robustness and structural priors hold particular promise, with early results reported in several of the papers here.

As a very new area, argument mining is also working *ab initio* on challenges such as data availability, annotation standards, corpus definition and publication, as well as quantification, validation and evaluation of results. Again, several papers here are tackling these community-oriented, practical – but vitally important – problems. We are also very pleased to introduce for the first time a special track focusing on an 'Unshared Task' to bootstrap the process of shared data provision for the community. The contributions to this track will lead to a detailed panel discussion with a goal of establishing some initial momentum to what will hopefully become a regular part of the Argument Mining workshop series.

This year also sees a special track on Debating Technologies reflecting the thread of work in the area that focuses on applications of the techniques in solving real problems in man-machine communication, driven in part by commercial R&D and by IBM's Debating Technology team in particular.

We were delighted with the quantity and quality of submissions, and as a result have developed a packed programme. The workshop attracted 31 submissions in total, of which 13 were accepted as full papers, four as short papers and a further three as contributions to the Unshared Task Panel. As the area continues to grow with an increasing number of groups turning their attention to the problems presented by argument mining, we look forward to seeing further growth in the workshop and the community that it supports.

CAR Dundee, June 2016

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- 09:30–09:50 Summarizing Multi-Party Argumentative Conversations in Reader Comment on News Emma Barker and Robert Gaizauskas
- 09:50–10:10 *Argumentative texts and clause types* Maria Becker, Alexis Palmer and Anette Frank
- 10:10–10:30 Contextual stance classification of opinions: A step towards enthymeme reconstruction in online reviews Pavithra Rajendran, Danushka Bollegala and Simon Parsons
- 10:30–11:00 Coffee break

### 11:00-12:30 Session II

- 11:00–11:20 *The CASS Technique for Evaluating the Performance of Argument Mining* Rory Duthie, John Lawrence, Katarzyna Budzynska and Chris Reed
- 11:20–11:40 *Extracting Case Law Sentences for Argumentation about the Meaning of Statutory Terms* Jaromir Savelka and Kevin D. Ashley
- 11:40–12:00 *Scrutable Feature Sets for Stance Classification* Angrosh Mandya, Advaith Siddharthan and Adam Wyner
- 12:00–12:15 Argumentation: Content, Structure, and Relationship with Essay Quality Beata Beigman Klebanov, Christian Stab, Jill Burstein, Yi Song, Binod Gyawali and Iryna Gurevych
- 12:15–12:30 Neural Attention Model for Classification of Sentences that Support Promoting/Suppressing Relationship Yuta Koreeda, Toshihiko Yanase, Kohsuke Yanai, Misa Sato and Yoshiki Niwa

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- 14:00–14:20 *Towards Feasible Guidelines for the Annotation of Argument Schemes* Elena Musi, Debanjan Ghosh and Smaranda Muresan
- 14:20–14:40 *Identifying Argument Components through TextRank* Georgios Petasis and Vangelis Karkaletsis
- 14:40–15:00 *Rhetorical structure and argumentation structure in monologue text* Andreas Peldszus and Manfred Stede
- 15:00–15:15 *Recognizing the Absence of Opposing Arguments in Persuasive Essays* Christian Stab and Iryna Gurevych
- 15:15–15:30 *Expert Stance Graphs for Computational Argumentation* Orith Toledo-Ronen, Roy Bar-Haim and Noam Slonim
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- 16:00–16:20 *Fill the Gap! Analyzing Implicit Premises between Claims from Online Debates* Filip Boltuzic and Jan Šnajder
- 16:20–16:40 *Summarising the points made in online political debates* Charlie Egan, Advaith Siddharthan and Adam Wyner
- 16:40–17:00 What to Do with an Airport? Mining Arguments in the German Online Participation Project Tempelhofer Feld Matthias Liebeck, Katharina Esau and Stefan Conrad
- 17:00–17:25 Panel Discussion: Unshared Task

*Unshared task: (Dis)agreement in online debates* Maria Skeppstedt, Magnus Sahlgren, Carita Paradis and Andreas Kerren

Unshared Task: Perspective Based Local Agreement and Disagreement in Online Debate

Chantal van Son, Tommaso Caselli, Antske Fokkens, Isa Maks, Roser Morante, Lora Aroyo and Piek Vossen

Unshared Task: A Preliminary Study of Disputation Behavior in Online Debating Forum

Zhongyu Wei, Yandi Xia, Chen Li, Yang Liu, Zachary Stallbohm, Yi Li and Yang Jin

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17:30 Close