

Computational Argumentation

Topic Assignment Process

Henning Wachsmuth

henningw@upb.de

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Participation and topic assignment process

▪ Topic assignment

- All 24 students registered now can participate in the course.
There will be no further addition of participants.
- Each topic needs to be presented in group work by up to three students.
This includes a lecture and a tutorial, both of which have to be passed.

▪ Your task (each of you!)

- Inform yourself about the topics and articles in this presentation.
- Choose 3 topics with ordered preferences.
Example: "My topic preferences are: (1) VII (2) VIII (3) X"
- **Until Monday, April 22, 23:59: Send e-mail with preferences to me.**
henningw@upb.de, subject: [ca] Topic preferences
- **Optional: Name up to two other participants that you want to work with.**
Example: "I like to work with Albert Einstein (1234567) and Mahatma Gandhi (9876543)."



<https://pixabay.com>

▪ Important

- **If you don't send the e-mail in time, you will *not* get a topic.**
- Topic assignment will be announced until the next lecture.

Topic overview

- | # | Topic | Lecture | Tutorial |
|-------|--|---------|----------|
| VI. | Mining of argumentative units | May 15 | May 21 |
| VII. | Mining of supporting and objecting units | May 22 | May 28 |
| VIII. | Mining of argumentative structure | May 29 | June 4 |
| IX. | Assessment of the structure of argumentation | June 5 | June 11 |
| X. | Assessment of the reasoning of argumentation | June 12 | June 18 |
| XI. | Assessment of the quality of argumentation | June 19 | June 25 |
| XII. | Generation of argumentation | June 26 | July 2 |
| XIII. | Development of an argument search engine | July 3 | July 9 |
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- **Notice**
 - Drafts of lecture and tutorial material need to be submitted 7 days before.
 - Feedback will be given, you can also meet with me before submission.
For more info, see the orga slides from last lecture.
 - Topics will be assigned based on topic preferences, group preferences, test submission, and (ultimately) randomly.

Literature for topic VI and VII (just first suggestions)

VI. Mining of argumentative units

- Argumentation Mining, Chapter 5 (Stede and Schneider, 2018)
- End-to-End Argumentation Mining in Student Essays (Persing and Ng, 2016)
- Argumentative Writing Support by means of Natural Language Processing (Stab, 2017)
- Unit Segmentation of Argumentative Texts (Ajjour et al., 2017)
- ... *more to be found...*

VII. Mining of supporting and objecting units

- Argumentation Mining, Chapter 6 (Stede and Schneider, 2018)
- Stance Classification of Context-Dependent Claims (Bar-Haim et al., 2017)
- Show Me Your Evidence — An Automatic Method for Context Dependent Evidence Detection (Rinott et al., 2015)
- Retrieval of the Best Counterargument without Prior Topic Knowledge (Wachsmuth et al., 2018)
- ... *more to be found...*

Literature for topic VIII and IX (just first suggestions)

VIII. Mining of argumentative structure

- Argumentation Mining, Chapter 7 (Stede and Schneider, 2018)
- Identifying Attack and Support Argumentative Relations using Deep Learning (Cocarascu and Toni, 2017)
- Context-aware Argumentative Relation Mining (Nguyen and Litman, 2016)
- Joint Prediction in MST-style Discourse Parsing for Argumentation Mining (Peldszus and Stede, 2015)
- ... *more to be found...*

IX. Assessment of the structure of argumentation

- Argumentation Mining, Chapter 7+8 (Stede and Schneider, 2018)
- Using Complex Argumentative Interactions to Reconstruct the Argumentative Structure of Large-Scale Debates (Lawrence and Reed, 2017b)
- A Universal Model of Discourse-Level Argumentation Analysis (Wachsmuth et al., 2017c)
- The Impact of Modeling Overall Argumentation with Tree Kernels (Wachsmuth et al., 2017f)
- ... *more to be found...*

Literature for topic X and XI (just first suggestions)

X. Assessment of the reasoning of argumentation

- Argumentation Mining, Chapter 8 (Stede and Schneider, 2018)
- Frame- and Entity-Based Knowledge for Common-Sense Argumentative Reasoning (Botschen et al., 2018)
- The Argument Reasoning Comprehension Task (Habernal et al., 2018b)
- Classifying Arguments by Scheme (Feng and Hirst, 2011)
- *... more to be found...*

XI. Assessment of the quality of argumentation

- Argumentation Mining, Chapter 8 (Stede and Schneider, 2018)
- Which Argument is More Convincing? Analyzing and Predicting Convincingness of Web Arguments using Bidirectional LSTM (Habernal et al., 2016)
- Computational Argumentation Quality Assessment in Natural Language (Wachsmuth et al., 2017b)
- Winning on the Merits: The Joint Effects of Content and Style on Debate Outcomes (Wang et al., 2017)
- *... more to be found...*

Literature for topic XII and XIII (just first suggestions)

XII. Generation of argumentation

- Argumentation Mining, Chapter 9 (Stede and Schneider, 2018)
- Claim Synthesis via Predicate Recycling (Bilu and Slonim, 2016)
- A Computational Approach for Generating Toulmin Model Argumentation (Reisert et al., 2015)
- End-to-End Argument Generation System in Debating (Sato et al., 2015)
- *... more to be found...*

XIII. Development of an argument search engine

- Argumentation Mining, Chapter 10 (Stede and Schneider, 2018)
- On the Retrieval of Wikipedia Articles Containing Claims on Controversial Topics (Roitman et al., 2016)
- ArgumenText: Searching for Arguments in Heterogeneous Sources (Stab et al., 2018)
- Building an Argument Search Engine for the Web (Wachsmuth et al., 2017e)
- *... more to be found...*

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