Dialog-Based Online Argumentation
A Dialog-Based Argumentation System for Online Participation
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Motivation and Central Research Topic
State of the art for large scale online discussions:
• Forum? → Does not scale well for many participants!
• Pro-Contra List? → Only for one proposal!
• Argumentmaps? → Expert knowledge necessary!

⇒ Current approaches do not scale, are unstructured or too complex!
⇒ Novel approach: Simulation of dialog between participants, whereby the system recycles arguments that are given by users!
⇒ A Dialog-Based Argumentation System for Online Participation
⇒ D-BAS

Approach and Current Status
Idea: Simulation of a real world discussion!
• System is a representative of those users, who already participated
• System conducts a dialog with the user:
1. Present a single argument
2. Gathering feedback
3. Next argument based on feedback

First Fieldexperiment: May 2017
• 318 distinct visitors / 47 registrations
• Map with 235 arguments
• Decentralized moderation system
• First real world argumentation map

Questionnaire:

Problem Statements:
• Clarity of contributions
• Untrained participants
• Scalability and polarization

Further Questions:
• ... present the approach?
• ... get feedback?
• ... bootstrap an ongoing discussion?
• ... select the next argument?
• ... accept new statements?
• ... review data?
• ... recycle arguments as a resource?
• ... embed it into arbitrary websites?
• But we solved everything!

Selected Publications:
• Krauthoff, Meter, and Mauve, M. (2017): “Dialog-Based Online Argumentation: Findings from a Field Experiment”. In Proceedings of the 1th Workshop on Advances in Argumentation in Artificial Intelligence.

Inter- und Transdisciplinarity
Theoretical Computer Science: Theory of argumentation and graphs
Practical Computer Science: Natural language processing
Social Science: Design and execution of laboratory and field experiments
Entire Colleagues: Feedback for D-BAS

Supervisor Team
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• Prof. Dr. Martin Mauve (Computer Science, HHU)
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Live-System
https://dbas.cs.hhu.de
Github
https://github.com/hhuon/dbas
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