



Jebediah – Arguing with a Social Bot

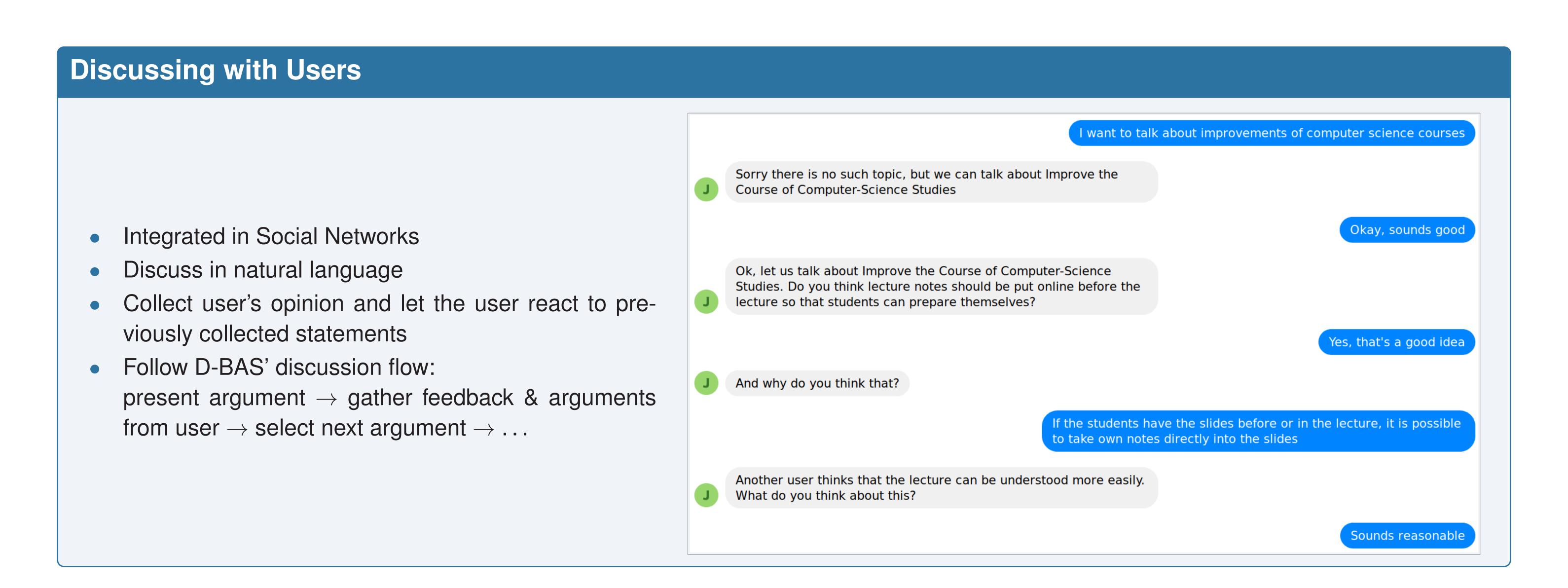
Dialog-Based Discussions in Social Networks

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Jebediah - a Social Bot for Online Argumentation

Jebediah is a social bot based on Google's framework Dialogflow for *Artificial Intelligence* (AI) development. It connects Dialogflow with a *Dialog Game Execution Platform* (DGEP) such as D-BAS' backend. Dialogflow enables a seamless integration into many popular social networks, e.g. Facebook or Twitter, and provides processing of text-input from conversations. We leverage this to enable natural language access where the AI is used to parse and interpret the user's input, whereas the interpreted data is sent to D-BAS' DGEP, in order to calculate the next steps in the discussion.

D-BAS is our *Dialog-Based Argumentation System*, which has been presented before. It enables structured discussions and collects statements from a big number of participants. These statements are then put into an argumentation graph for further analysis. D-BAS then presents new users the statements from previous participants and aims to tease more statements from the users.



D-BAS - A Dialog-Based Argumentation System

The main idea of D-BAS is to let users exchange proposals and arguments with each other in the form of a timeshifted dialog where arguments are presented and acted upon one-at-a-time. We highlight the key research challenges that needed to be addressed in order to realize such a system, provide solutions for those chal-

lenges, report on a full scale implementation of D-BAS and summarize the findings from a real world e-participation process, where D-BAS provided the infrastructure for online argumentation.

Open Source

Discussion-related software should be made open source. Otherwise there is no possibility to verify its integrity.

Jebediah and all other projects from our working group, are open source and can be downloaded for free on GitHub:

https://github.com/hhucn

Publications

C. Meter, B. Ebbinghaus and M. Mauve. "Jebediah - Arguing With a Social Bot" Proceedings of the 2018 Conference on Computational Models of Argument

T. Krauthoff, C. Meter, M. Baurmann, G. Betz and M. Mauve. "Dialog-Based Online Argumentation" Proceedings of the 2018 Conference on Computational Models of Argument