

Argument Mining to Support Behaviour Change

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Abstract

In this research abstract I discuss the need for argument mining tools within the context of behaviour change interventions that are designed to effect real change when applied to difficult societal problems. As we begin to deploy argumentation machinery to help us to deal with complex real-world issues, whether to help understand the motivations and beliefs of concerned individuals or to tackle those beliefs directly, there is a growing need for large corpora of analysed and well structured arguments. However, argument analysis is difficult, and the scale of the challenge is huge when the sheer size of the textual, not to mention non-textual, sources of argument are considered. One solution to tackling these data analysis issues is to mine them for arguments, initially using a diversity of techniques.

I advocate multiple approaches but a primary element of my solution is the development of work flows and supporting tools to make both human-supported and automated analysis an easier process to perform at scale. Additionally, there is the need to provide a comprehensive, scalable and reliable open infrastructure for describing, sharing, and reusing arguments and argumentation processes. This can be partly accomplished by supplementing existing tools, for example, using the DGDG [5] to describe interactions, guiding interaction using argumentation schemes [3], describing arguments and their dialogues [2], analysing real-world interactions to produce better understanding of how, when and why they occur and proceed [4], and providing opportunities to capture more structured interactions in the first place [1].

My aim is to gather sufficient resources to support the deployment of argumentation technologies that help us to tackle tough, large-scale, real-world problems that affect lots of people.

References

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