

Argument Mining: Manual and automatic annotation of short user-generated texts

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In the last few years, argument mining has emerged as a new field that aims to identify argumentative portions in natural language text, and to uncover the structure of the underlying arguments. Domains that have been addressed include legal text, student essays, and customer reviews (as a follow-up step to sentiment analysis). In this talk, I suggest an annotation scheme for argumentation, and present results on automatic analysis of our argumentative microtext corpus - a collection of 115 short texts that have been produced by students in response to a trigger question, which usually bears the form “Should one (not) do X ?” I give results from a joint-inference approach to this task, present various extensions, and then discuss how the approach scales up to longer text.

Biography. Manfred Stede studied Computer Science and Linguistics at TU Berlin and Edinburgh University, and received an M.Sc. in Computer Science from Purdue University (USA). In 1996, he earned his Ph.D. at the University of Toronto with a thesis on multilingual text generation. From 1995 to 2000, he worked at TU Berlin in the large national “Verbmobil” project, which built a system for translating spoken language between German, English, and Japanese. After a short interlude at a company in Berlin, he became a professor in Applied Computational Linguistics at Potsdam University in 2001. His research mainly revolves around issues of text structure, ranging from theoretical models to its automatic analysis, with applications in, e.g., text mining and summarization. Recently, a focus of his research is on different dimensions of subjectivity in language, where speakers convey their attitudes, opinions, and arguments. The well-known computational application is Sentiment Analysis, where Stede contributed to a successful system implementing a lexicon-based approach for English. As a follow-up step, he is now interested in Argument Mining, i.e., the automatic discovery of authors claims, reasons supporting them, and possible objections.

Stede published three monographs, fifteen journal papers, and numerous conference papers and book chapters. He directed research projects funded by various German national agencies and the European Union, sometimes in collaboration with local companies.