Semantic Search on Text and Knowledge Bases

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Abstract

I will present an overview of our current research on semantic search on text and knowledge bases. By semantic search I mean search with meaning. Our goal is to make the search as convenient as possible without losing transparency. On approach is to aid the user in incremental query construction. Another approach is to allow questions in free-form natural language and provide feedback on the interpretation of the question in an easily digestible form. I also believe that it is a good idea to combine text and knowledge bases. Structured information is best represented in a knowledge base (the semantics is then explicit in the data) but the bulk of our knowledge of the world will always be in the form of text. I will a show a lot of examples and demos.

Bio

Hannah Bast is a professor of computer science at the University of Freiburg at the foot of the beautiful black forest in the southwest of Germany. She is a big fan of easy to use and powerful information systems of all kinds. One of the algorithms from her work is used for public transit routing on Google Maps. Her CompleteSearch engine powers the bibliography search on DBLP. She is convinced of the great potential of deep learning for natural language understanding. She believes that the world has more pressing problems than whether AI will eventually take over.

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