Humanizing the Machine with Language: Building the Bridge between Data and Information

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ABSTRACT

It is clear that Artificial Intelligence (AI) is transforming the world in ways that no other set of technologies ever have. Technologies of machine learning, text analysis, recommendation, and natural language processing are all being applied to a wide variety of problems and yet most of us still struggle to understand what their results mean or even the numbers behind them. The numbers alone simply do not provide us with what we really need: information and insight. The data and the algorithms are only the first step in finding the insights we want and making them useful to the decision makers who need them.

In this talk, I will present a set of approaches to connecting humans with the intelligent systems that serve them using the tool that is most natural to us, language. We will look at how Intelligent Narrative Generation can play the crucial role of bridging the gap between the world of numbers and symbols and our need for understandable insights. We will dive into examples from business, education and Law to show how the power of language can provide us all with the insights that are still trapped in the wealth of data we now control.

Kristian J. Hammond is the Bill and Cathy Osborn Professor of Computer Science at Northwestern University and the co-founder of the Artificial Intelligence company Narrative Science. He has spent most of his career focused on the problem of making machines smarter. Since the fall of 2016, he has been the faculty lead of Northwestern's CS + X initiative, exploring how computational thinking can be used to transform fields such as the law, medicine, and education. Most recently, he has taken on the role of directing Northwestern's Master of Science in Artificial Intelligence. Kris's primary research is at the intersection of data analytics and human/machine communication. He works on computational methods for interpreting user needs, translating those needs into machine executable queries and analysis, and then mapping the results into natural language. His vision is to automate the relationship between business goals and data science in an effort to scale the link between the data that serves us and the language we need to understand it. Kris believes in humanizing computers with the aim of stopping the process of mechanizing people.