

Law, Language and AI: Integrating Fluency and Truth

Kristian J. Hammond
Northwestern University
McCormick School of Engineering
2233 Tech Drive
Mudd Room 3109
Evanston, IL 60208 USA
Kristian.Hammond@northwestern.edu

ABSTRACT

Artificial intelligence (AI) is reshaping numerous industries, and one of the most impactful developments in this landscape has been the rise of generative AI systems such as ChatGPT. Powered by a unique blend of machine learning and natural language processing capabilities, ChatGPT has emerged as a transformative technology that has redefined the realm of human-computer interaction.

The impact of this technology is far reaching and differs from what we have seen before in that it is grounded in language. As a result, it is impacting areas that have been somewhat resistant to technological change in the past. Fields that are themselves grounded in the language, such as the Law, are now trying to find ways to adapt to the technology.

In the face of these transformations, it is crucial that we understand what these technologies really are and how they can and should be used. We need to distinguish between skill in how to say things and the knowledge of what to say.

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In this talk, Dr. Hammond will outline an approach that leverages the power of these models and their near miraculous fluency to create systems that are both expressive and truthful. Using a synthesis of data, analytics, and language models, these systems are able to provide access to knowledge and the inference it supports to provide access to information that is well beyond the reach of language models while leveraging the fluency that is at their core.

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.