The Battle for the Future of Data Mining

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ABSTRACT

Deep learning has catapulted to the front page of the New York Times, formed the core of the so-called "Google brain", and achieved impressive results in vision, speech recognition, and elsewhere. Yet researchers have offered simple conundrums that deep learning doesn't address. For example, consider the sentence: "The large ball crashed right through the table because it was made of Styrofoam." What was made of Styrofoam? The large ball? Or the table? The answer is obviously "the table", but if we change the word "Styrofoam" to "steel", the answer is clearly "the large ball". To automatically answer this type of question, our computers require an extensive body of knowledge. We believe that text mining can provide the requisite body of knowledge. My talk will describe work at the new Allen Institute for AI towards building the next-generation of text-mining systems.

Categories and Subject Descriptors

K.0 [Computing Milieux]: General

Keywords: data mining; deep learning; text-mining

BIO

Dr. Oren Etzioni is Chief Executive Officer of the Allen Institute for AI. He was a Professor at the University of Washington's Computer Science department starting in 1991, receiving several awards including GeekWire's Hire of the Year (2014), Seattle's Geek of the Year (2013), the Robert Engelmore Memorial Award (2007), the IJCAI Distinguished Paper Award (2005), AAAI Fellow (2003), and a National Young Investigator Award (1993). He was also the founder or co-founder of several companies including Farecast (sold to Microsoft in 2008) and Decide (sold to eBay in 2013), and the author of over 100 technical papers that have garnered roughly 20,000 citations. The goal of Oren's research is to solve fundamental problems in AI, particularly the automatic learning of knowledge from text. Oren received his Ph.D. from Carnegie Mellon University in 1991, and his B.A. from Harvard in 1986.

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