Johns Hopkins Institute for Assured Autonomy and the Department of Computer Science

Present

## **Knowing what AI Systems Don't Know and Why it Matters**

October 29, 2020 | 11:00 am-Noon Click **here** to access this virtual event <a href="http://bit.ly/Jim-Hendler">http://bit.ly/Jim-Hendler</a>> Password: 962515

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## **ABSTRACT**

The meteoric rise in performance of modern AI raises many concerns when it comes to autonomous systems, their use, and their ethics. In this talk, Jim Hendler reviews some of the challenges emerging, with a particular emphasis on one of the issues faced by current deep learning technology (including neural symbolic approaches) – how do AI systems know what they don't know? Hendler avoids the generic issue, which has been raised by philosophers of AI, and looks more specifically at where the failures are coming from. The limitations of current systems, issues such as 'personalization' that increase the challenge, and some of the governance issues that arise from these limitations will be covered.

## **BIO**

James Hendler is the Director of the Institute for Data Exploration and Applications and the Tetherless World Professor of Computer, Web and Cognitive Sciences at RPI. He also heads the RPI-IBM Center for Health Empowerment by Analytics, Learning and Semantics (HEALS). Hendler has authored over 400 books, technical papers and articles in the areas of Semantic Web, artificial intelligence, agent-based computing and high-performance processing. One of the originators of the "Semantic Web," Hendler was the recipient of a 1995 Fulbright Foundation Fellowship, is a former member of the US Air Force Science Advisory Board, and is a Fellow of the AAAI, BCS, the IEEE, the AAAS and the ACM. He is also the former Chief Scientist of the Information Systems Office at the US Defense Advanced Research Projects Agency (DARPA) and was awarded a US Air Force Exceptional Civilian Service Medal in 2002. In 2016, he became a member of the National Academies Board on Research Data and Information, in 2017 an advisor to the National Security Directorate at PNNL, and in 2018 was elected a Fellow of the National Academy of Public Administration.

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