Update to the 2016 National Artificial Intelligence Research and Development Strategic Plan RFI Responses

DISCLAIMER: The <u>RFI public responses</u> received and posted do not represent the views and/or opinions of the U.S. Government, National Science and Technology Council (NSTC) Select Committee on Artificial Intelligence (AI), NSTC Subcommittee on Machine Learning and AI, NSTC Subcommittee on Networking and Information Technology Research and Development (NITRD), NITRD National Coordination Office, and/or any other Federal agencies and/or government entities.
We bear no responsibility for the accuracy, legality or content of all external links included in this document.

Subject: RFI Response: National Artificial Intelligence Research and Development Strategic Plan

From: Cooper, Greg

Causal modeling, learning, reasoning, and explanation are at the core of much of intelligent behavior. However, the current AI Strategic Plan does not mention AI causality research and its importance.

Decision analytic modeling and reasoning is the most successful existing approach that we have for performing optimal decision making. Like causality, it is a methodology that almost certainly will be at the core of future AI systems, including especially General AI systems. Interestingly, causality and decision analysis are deeply intertwined. The AI Strategic Plan does not explicitly mention the critical importance of funding additional computational decision analytic research in AI.

In summary, both causality and decision analysis methods deserve to be among the highest priorities for national funding of cross-cutting R&D foundations research, but the current AI Strategic Plan does not mention them directly.