Defense Advanced Research Projects Agency

Strategic Technology Office

Special Notice

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Theory of Mind

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DARPA is interested in developing new capabilities to enable national security decisionmakers to optimize strategies for deterring or incentivizing actions by adversaries. As such, the agency is is searching for new technical solutions in this space.

Actions are determined by situational awareness, ideas of risks and rewards, and overarching strategy. The goal of an upcoming program will be to develop an algorithmic theory of mind to model adversaries' situational awareness and predict future behavior. The program will seek to combine algorithms with human expertise to explore, in a modeling and simulation environment, potential courses of action in national security scenarios with far greater breadth and efficiency than is currently possible. This would provide decisionmakers with more options for incentive frameworks while preventing unwanted escalation.. The program will seek not only to understand an actor's current strategy but also to find a decomposed version of the strategy into relevant basis vectors to track strategy changes under non-stationary assumptions.

DARPA is issuing this Special Notice to express interest in this field as it explores an upcoming program to advance state-of-the-art in theory of mind and deterrence and compellence. Researchers and organizations that are interested in developing technologies related to this or other technologies are encouraged to learn more about working with DARPA at https://www.darpaconnect.us. DARPAConnect is a free resource established to help facilitate new and nontraditional performers to work with DARPA. This notice is not a request for information or solicitation. This information is subject to change in content, relative importance, or other meaningful ways without further notification.