



Artificial Intelligence for Small Unit Maneuver (AISUM) Innovation Challenge

What: Invitation to participate in a NavalX Midwest Tech Bridge virtual Innovation Challenge for Artificial Intelligence for Small Unit Maneuver (AISUM)

Why: This Innovation Challenge session will focus on providing industry and academia with general information and understanding of the future operational and technical challenges facing the Department of Defense (DoD) regarding the use of artificial intelligence in support of small units. This Innovation Challenge will request white papers from industry and academia on novel concepts and technologies aligned to the operational and technical challenges presented.

Background: Naval Surface Warfare Center, Crane Division (NSWC Crane) has been supporting a number of projects for different sponsors focused on exploiting the advantages of artificial intelligence. This includes efforts in data mining, object recognition, autonomy, decision aids, development of testing environments and several others. These projects have been in support of Defense Advanced Research Projects Agency (DARPA), Office of Naval Research (ONR), Naval Special Warfare (NSW), Special Operations Command (SOCOM), Marine Corps Warfighting Lab (MCWL) and others.

In an effort to gain a more focused level of research and grow the capabilities Indiana and the Midwest region, NSWC Crane is working with SOCOM, ONR, and other government partners to develop a campaign of events that will focus on technical challenges associated with artificial intelligence. It is envisioned that these events will be similar to a Prize Challenge or Advanced Naval Technology Exercise (ANTX) events and will incorporate an increasing level of technical complexity. These events will provide an opportunity for industry and academia to test their concepts and technologies in an operationally relevant environment. In addition, we will bring various stakeholders and decision-makers from across DoD to witness, interact and provide feedback to the participants.

Results of the Innovation Challenge: We anticipate the results of this Innovation Challenge to be two-fold.

- First, we expect members of industry and academia to develop a deeper understanding of the operational and technical challenges that will result in further research and development focused upon these problems.
- Second, we plan to carefully evaluate the submitted white papers against the operational and technical challenges presented. Our goal is to explore potential opportunities for investment for the most interesting, relevant and valuable white papers.

White Papers: We are requesting white papers on two different technical areas. 1) Any concepts or technologies aligned to the AISUM future problem. 2) Any concepts or technologies that could support future events focused on the AISUM problem (e.g. simulation environments, sensor technologies, data collections tools, etc.).

Due date for white paper submissions is July 1, 2020. White papers should be submitted to Kelly Stephens at kelly.stephens.ctr@navy.mil.

Contact: If you have any questions, please contact: Andy Brough, Expeditionary Warfare Lead, NSWC Crane, at andrew.brough@navy.mil.