Department of Defense Joint Artificial Intelligence Center Awards Navy Project Agreement to accelerate AI development efforts through Tradewind
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The Department of Defense Joint Artificial Intelligence Center and the Army Contracting Command – Rock Island awarded an Other Transaction (OT) Agreement on March 18 for the Naval Surface Warfare Center (NSWC) Corona's Federated Machine Learning (ML) project. Federated ML was awarded to FedML Inc. and the project seeks to reduce the Navy's operational gaps by unifying data feeds to enhance operational situational awareness. Inconsistent hardware and software components make it challenging for Naval operators to process, communicate, and share tactical data amongst fleets.

FedML Inc. will leverage artificial intelligence to synthesize fleet operations ranging from sensors, navigation, system condition assessment, aerial and satellite imaging, and intelligence assets from heterogeneous hardware and assets. This will allow for fleet-wide unified machine learning to reduce current challenges and enhance the fleet's understanding of the operational landscape.

During different mission scenarios, individual assets may have access to tactical data that is not available to the rest of the fleet, as well as different network bandwidths, memory limits, and local data distributions. This presents many challenges, such as denied/silent communications (COMMs), adversarial network intrusion, heterogeneous hardware bandwidth limitations, and non-I.I.D. (heterogeneous) data sources. This prototype project establishes an AI/ML framework operating in real-time, rapidly processing the data for fleets.

The project agreement was awarded via the Tradewind ecosystem by the Army Contracting Command – Rock Island, on behalf of the JAIC under the OT prototyping authority. Utilizing this method of procuring allows continued access to the development of the product while concurrently collecting data to aid in future solutions. The JAIC and its partners are continuing to look at a diverse set of technology solutions to deliver the best AI capabilities across the Department.

Additionally, the JAIC, along with academia and industry partners, together evaluated User Stories in advance to make the final determination for the project agreement awardee. Using this holistic approach in the Tradewind ecosystem allowed for more vendors to compete, with a more viable product, at the best cost for the government.

Tradewind helps DoD components to deliver capabilities through agile methodologies, tailored and optimal intellectual property strategies, and ethical and responsible AI. This will be done while eliminating traditional bottlenecks found in DoD acquisitions. As Tradewind develops into a data centric model, lessons learned from this effort will be collected and improved for future DoD AI efforts.

For more information on Tradewind, visit www.AI.mil or https://tradewindai.com/