BAE Wins DARPA Contract to Develop Machine Learning Analytics

BURLINGTON, Mass. – BAE Systems was awarded a contract by the U.S. Defense Advanced Research Projects Agency (DARPA) to develop machine learning analytics as a service – a first-of-its-kind, cloud-based model for the government, the company said in an April 21 release.

This new technology model seeks to provide an automated service that aims to leverage commercial and open source data, including satellite imagery, to deliver continuous worldwide situational awareness for a diverse range of challenges, including anomaly detection and prediction.

As part of DARPA's Geospatial Cloud Analytics (GCA) program, the BAE Systems FAST Labs research and development team aims to use the company's Multi-INT Analytics for Pattern Learning and Exploitation (MAPLE) technology.

This approach seeks to apply automated analytics to a problem, freeing operators to query the data to answer specific questions about important mission issues at hand while removing the traditional need to conduct extensive manual analysis. For the purposes of this program, the BAE team seeks to apply MaaS to a proposed maritime challenge to automatically and reliably detect vessels that are engaging in illegal fishing.

Our technology can be used across a number of domains and can be leveraged in the cloud, making it an extremely flexible and easily scalable solution that provides operators with worldwide vigilance. Our goal is to automate analytics in a new way so that we can take the incredible capabilities of machine learning to discover nuanced patterns in both sparse

and large data volumes to solve extremely complicated problems that could threaten our nation’s security.

Research on the GCA program leverages BAE’s machine learning and artificial intelligence capabilities such as adaptive reasoning and analysis in its autonomy technology portfolio. The GCA program is one of several fields BAE Systems is researching, including current work on DARPA’s Hallmark Tools, Capabilities, and Evaluation Methodology program, and represents several years of research on various other programs with DARPA as well as the Air Force Research Lab.