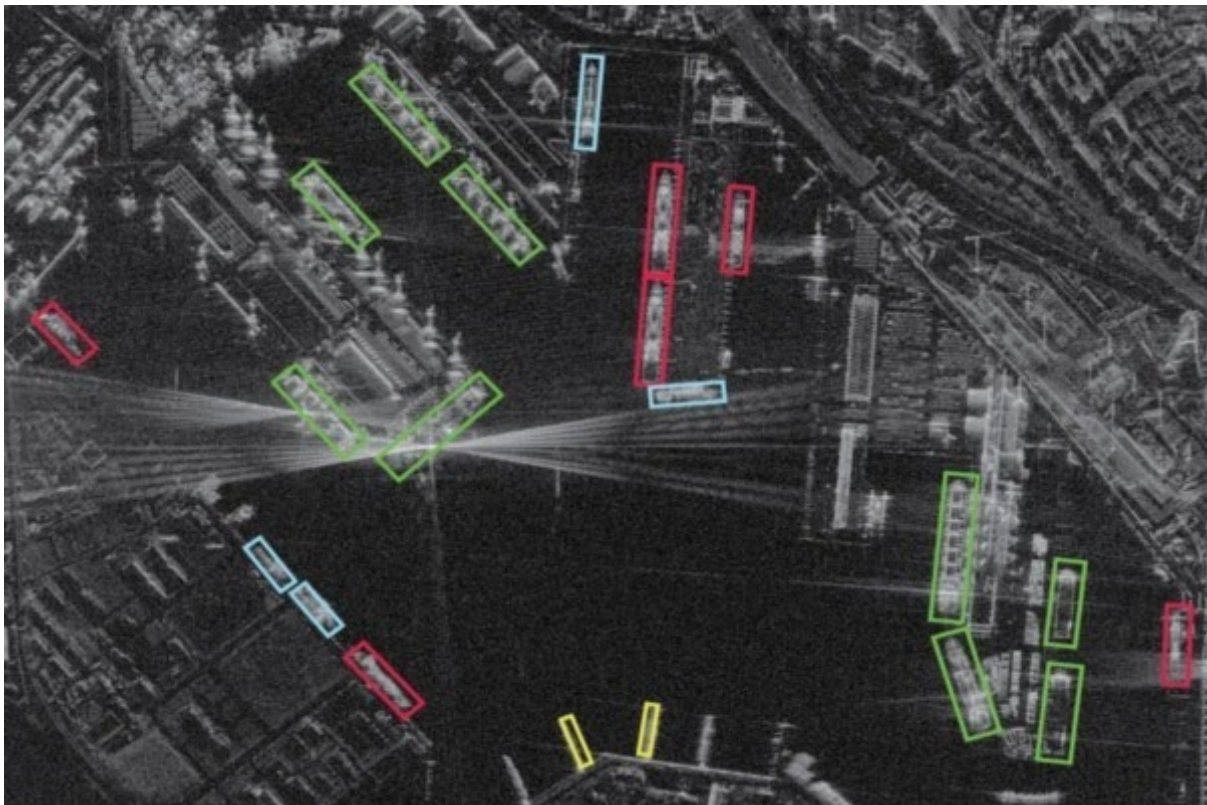


The role of AI in space-based surveillance is growing

25 May 2024 Adam Jeffs, Editor, SAE Media Group

The NGA is harnessing AI technologies, such as automatic vessel classification, to enhance space-based surveillance capabilities



Credit: Capella Space

The role of AI in space-based surveillance is growing, with Capella Space, a U.S. space technology company, announcing a fully automated [marine vessel classification system](#) on May 5. The system utilises AI to assess satellite images to detect ships and run historical analysis against the company's archives to identify them.

With the eyes of military analysts across the globe fixed firmly upon key maritime choke points at the moment, such as in the Strait of Hormuz in the

Red Sea, the practical applications for the technology are clear. The system essentially reduces the latency between generation of satellite imagery and identification of any vessels that have been captured in the images which is critical when time is of the essence, as is generally the case for military surveillance.

Dan Getman, VP of Product at Capella Space, said: “When it comes to intelligence, speed and accuracy is of the essence. Capella’s platform effectively minimizes the latency from tasking to intelligence extraction.”

The announcement from Capella Space came one day prior to an announcement by the U.S. National Geospatial-Intelligence Agency (NGA) of its first [commercial solutions opening](#). The NGA expressed a need for commercial technology to aid in tracking maritime threats across the globe. With Capella Space already having developed a [strong partnership with the NGA](#), it is likely that we will see the technology used to improve NGA’s maritime domain awareness.

The NGA also [recognises the value of AI](#) technologies such as machine learning and computer vision outside of maritime surveillance, using them alongside traditional surveillance techniques to inform military leaders across all operations, from the battlefield to geopolitical analysis. According to Vice Adm. Frank Whitworth, Director of the NGA, the NGA are “very excited about the trajectory of AI applications”. We will likely see the scope of AI for military applications expanding in the coming years, as commercial innovators advance the technology into new areas and its value becomes increasingly apparent to military and government.

The [Global MilSatCom 2024](#) conference will bring together a range of leading experts from across the globe to discuss the latest innovations and strategies in the military space sector.