Maritime Persistent Surveillance

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Automated video monitoring based on computer vision technologies has become a mainstream market offering that is now embedded in the products of dozens of companies and that has been deployed in physical security applications worldwide. These products do have limits, however. Consider maritime environments that challenge the machine intelligence with: noisy backgrounds caused by water motion, sun reflections, and wakes; vast areas of regard; a wide range of target sizes, types and apparent speeds; the need for distributed sensor processing and operator monitoring over a wide range of communications bandwidths.

Under Office of Naval Research sponsorship, ObjectVideo has addressed the most challenging aspects of maritime persistent surveillance and deployed video analytics software that monitors extremely wide areas, supports multiple cameras and multiple sensor modalities, is geo-aware, support a wide range of network capacities and provides users with intuitive, single screen monitoring capabilities.