

The Role of AI in National Security

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In July, Florida resident Tayyab Tahir Ismail was sentenced to 20 years in prison for distributing information pertaining to explosives online.

According to a press release issued by the FBI, Tahir posted bombmaking instructions on the internet, and on a social media platform. His goal was for that information to be used to create a weapon of mass destruction in support of violent jihad.

Social Media, IoT, Attack Planning and Radicalization

Use of the internet and social media to propagate radical views, share information related to a terror attack or plan for an attack is well documented.

- A research brief by the National Consortium for the Study of Terrorism and Responses to Terrorism found that more than 25 percent of Islamic extremists used social media to plan a domestic terror attack or travel to a foreign conflict zone;
- Research of terrorist activity in Syria and Iraq in 2014 noted the use of a variety of social media platforms, with Twitter as the most popular channel. In a three-month period, 59 Twitter accounts of Western fighters in Syria alone had produced a total of 154,119 tweets, with the average account posting 2,612 times; and
- In a December 2018 report on National Security, the U.S. Government Accountability Office (GAO) noted that “terrorists could...increase their use of

online communications to reach new recruits and disseminate propaganda.”

Technology as a Double-Edged Sword

GAO’s findings echoed those of a report just one year earlier from the Office of the Director of National Intelligence (ODNI), which noted that technology “will be a double-edged sword. On the one hand, it will facilitate terrorist communications, recruitment, logistics, and lethality. On the other, it will provide authorities with more sophisticated techniques to identify and characterize threats....”

The RAND Corporation furthers this analysis of technology’s role in prevention activities, finding that early phase terrorism prevention activities should include monitoring online content advocating violence, and messaging to encourage communities to identify radicalized individuals for intervention.

United Nations: Internet Can Aid in Counter-Terrorism

Against this backdrop, the United Nations recently found that the significant amount of knowledge about terrorist organizations activities on the internet can aid in counter-terrorism efforts, and that new technologies are helping proactively prevent, detect and deter terrorist attacks.

AI and machine learning are technologies that continue to take center stage in the identification of online threats and prevention of

catastrophic events, whether it’s from Islamic or right-wing extremists.

AI Can Help Assess Threats and Enhance Situational Awareness

In fact when it comes to enhancing situational awareness (SA), and better detecting and discerning real attacks from false alarms, the Center for Strategic and International Studies (CSIS) noted that “AI applications for all-source data fusion, front-line analysis, and predictive analytics promise the potential to unlock new insights and effectively enhance strategic SA.”

The organization went on to say that the vast amounts of open source data available through media, social media and the Internet of Things provides new indicators that are relevant to SA. Importantly, AI data mining can process large amounts of this information quickly and efficiently increase precision in the detail and quality of information collected.

The Radiance Solution

That’s exactly where technologies like Lumina’s Radiance platform come into play. Radiance’s Open Source Intelligence (OS-INT) includes more than 6,500 terms related to potential national security risks and threats. The platform conducts nearly 135,000 searches across all publicly-available data on the web, correlating names with these terms and cross-referencing over 1 million queries into Lumina’s proprietary databases of risk. A search of this magnitude—done manually—would take more than a year to complete.