

Wednesday, May 7, 2025

10:50 am – 11:10 am

Operator X: Transforming Cyber Defense with GenAI

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Abstract:

As nation-state offensive cyber operations increase, the DoD Cyber Mission Forces (CMF) and hunt forward teams face more complex environments and tasks, while being provided less training prior to missions. They often operate in offline environments with limited or no connectivity to the internet, increasing the challenge of completing complex engineering and analysis tasks.

This session covers how Large Language Models (LLMs) and Retrieval-Augmented Generation (RAG) can be used in a Generative AI solution designed to enhance the efficiency and effectiveness of the cyber warfighter. The presenter will highlight how AI agents can seamlessly integrate with defense information systems to empower cyber defenders in protecting critical data. Attendees will discover cutting-edge AI technologies that enhance information awareness, enabling both junior and senior cyber defenders to rapidly understand complex mission environments and deliver actionable intelligence to decision-makers.

The presentation will feature SealingTech's current development, Operator X, a groundbreaking Generative AI platform purposely built to interact with DoD cyber tools to help cyber defenders stay ahead of adversaries and ensure the resilience of defensive operations. An overview of current and future use cases of Generative AI for cyber defense will be provided. Additionally, the session will explore how Operator X can automate tedious, repetitive, time-consuming tasks, allowing cyber operators to focus on mitigating network threats.

3 Learning Objectives

Participants will learn the various use cases for Operator X

Grasp the powerful potential behind an agentic approach to combining LLMs with a RAG pipeline for cyber defense

Understand how this new capability levels the knowledge playing field between junior and senior operators