



Autonomous Capabilities for DoD Summit



Leveraging the Power of Autonomy for Operational Flexibility

September 25-26, 2019 | Mary M. Gates Learning Center, Alexandria, Virginia

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| 8:00 – 8:45 | Registration and Light Breakfast Reception Open |
| 8:45 – 9:00 | Event Chairman Opening Remarks Kevin Devine (Confirmed) Channel Sales Veritone |
| 9:00 – 9:45 | Advancing the Application of AI & Autonomous Systems Across the DoD to Better Counter the Adversary & Disrupt Future Conflicts <ul style="list-style-type: none"> - Current modernization priorities toward developing autonomous capabilities to improve Warfighter lethality & achieve technological superiority - Integrating AI to assist in more effective & efficient decision-making for increased operational readiness - Future efforts to build partnerships that accelerate the pace to get these lethal capabilities to the Warfighter Wayne Nickols (Tentative Pending Final Schedule) Assistant Director for Autonomy USD R&E |
| 9:45 – 10:30 | *Army Keynote Remarks* Preparing & Positioning the Army to Adopt AI for Operational Success <ul style="list-style-type: none"> - Modernizing and increasing the lethality of the force through the increased use of AI and autonomous technologies - Using AI to enhance response times & keep the proper level of decision making in the hands of the Soldier - Near term goals toward building an AI architecture that will become enduring and be able to facilitate the Army's ability to allocate resources for combat BG Matthew Easley, USA (Confirmed) Director, Army Artificial Intelligence Task Force Army Futures Command |
| 10:30 – 11:00 | Networking Break and Exhibits |
| 11:00 – 11:45 | *Event Keynote Remarks* U.S. Strategy: Developing Trustworthy AI Systems Through Effective Policies, R&D, and Public-Private Partnerships <ul style="list-style-type: none"> -Accelerating the adoption & application of AI/Autonomous technologies -Scaling AI's impact through establishing shared public datasets and environments for AI training and testing -Current & future efforts to enhance AI R&D through more efficient collaboration amongst government, industry, academia and non-profit organizations Dr. Lynne E. Parker (Confirmed) Assistant Director, Artificial Intelligence Office of Science and Technology Policy, White House |
| 11:45 – 12:30 | Current & Future Army Research Priorities Toward Applying AI to Exploit Autonomous Capabilities <ul style="list-style-type: none"> - Improving efficiency and speed of autonomous systems through the increased use of AI - Guiding ASA ALT's S&T modernization efforts to effectively handle threats across the full spectrum of Army and Joint operations - Near-term considerations towards acquiring autonomous capabilities & how industry partners can facilitate this process Todd Turner (Confirmed) Portfolio Director for Air Office of the Deputy Assistant Secretary of the Army (Research and Technology), ASA(ALT) |
| 12:30 – 1:30 | Networking Lunch |

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| 1:30 – 2:15 | <p>Current USAF Strategy to Implement Varying Levels of AI for Mission Success</p> <ul style="list-style-type: none"> - Driving down technical barriers of entry for the Airmen to access modernized data - Recognizing data as a strategic resource & using AI across the military and federal government to improve autonomous capabilities - Understanding the need for more computer language experts & why it is essential for utilizing AI to maintain dominance <p>Capt. Michael Kanaan, USAF (Confirmed) Co-Chair for Air Force Artificial Intelligence HQAF</p> |
| 2:15 – 3:00 | <p>Leading the Integration of AI, Autonomy, & Machine Learning Across the SOCOM Enterprise</p> <ul style="list-style-type: none"> - Ensuring a data driven, decision making culture that embraces AI & autonomous capabilities at the 'forward edge' - Utilizing AI & autonomy for direct SOF combat applications - Guiding SOCOM initiatives to dominate the digital space and use AI to empower a fast, reliable communications network <p>David Spirk, SES (Confirmed) Chief Data Officer USSOCOM</p> |
| 3:00 – 3:30 | <p>Industry Talk – iMerit</p> |
| 3:30-4:00 | <p>Networking Break and Exhibits</p> |
| 4:00 – 4:45 | <p>Army's R&D Initiatives to Integrate AI for Improved Autonomous Intelligent Maneuver</p> <ul style="list-style-type: none"> - Enhancing autonomous mobility for military vehicles in complex, challenging terrain - Ensuring autonomous vehicles are capable of self-management for logistics in terms of knowing when to refuel & recharge - Using AI to help vehicles with adversarial reasoning for the anticipation of enemy deception to better protect the Soldier <p>Dr. Alexander Kott (Confirmed) Chief Scientist CCDC-Army Research Laboratory</p> |
| 4:45 – 5:30 | <p>ONR Efforts to Integrate Autonomous and Unmanned Capabilities to Substantially Increase the Power of Naval Platforms</p> <ul style="list-style-type: none"> - Current Navy initiatives toward developing autonomy to enable systems that the Warfighter can appropriately rely on - Identifying technology requirements & types of trust that must be established to spur innovation & drive mission success for autonomous/unmanned systems - Future efforts to understand the science of autonomy vs the science of AI & how one enables the other in the Naval domain <p>Dr. Jason Stack, SES (Confirmed) Director, Ocean, Atmosphere, and Space Research Division Portfolio Manager for Autonomy Office of Naval Research</p> |

End of Day 1

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| 8:15 – 8:45 | Registration and Light Breakfast Reception Open |
| 8:45 – 9:00 | <p>Event Chairman Opening Remarks Kevin Devine (Confirmed) Channel Sales Veritone</p> |
| 9:00 – 9:45 | <p>Enabling Autonomy & AI for Combatant Commanders Across Multi-Domain Operations</p> <ul style="list-style-type: none"> - Integrating autonomous platforms with sensors onto Soldiers that are fitted with kinetic and non-kinetic weapons - Developing new ways to equip units with swarming capabilities - Near term considerations toward utilizing autonomous capabilities to counter adversaries' anti-access, area-denial capabilities to detecting & filter out threats to the Warfighter <p>Dr. Paul Zablocky (Confirmed) Program Manager, Strategic Technology Office DARPA</p> |
| 9:45 – 10:30 | <p>AFRL Efforts to Expand & Operationalize AI & Autonomous Capabilities to Enhance Future Weapons Systems</p> <ul style="list-style-type: none"> - Current initiatives to collaborate with the services to deploy autonomous systems to the Warfighter as quickly as possible - Future considerations toward developing scalable Warfighting technologies for operational success <p>Jean-Charles Ledé (Confirmed) Air Force Research Laboratory Autonomy Technical Advisor, OSD USD R&E Autonomy Col Lead</p> |
| 10:30-11:00 | <p>Teaming Autonomy</p> <ul style="list-style-type: none"> -What challenges does Teaming Autonomy present? (what does it mean, what does it take, and what does automation / AI / delegation to autonomous team members bring to this picture) -What is our vision for autonomous capabilities at Collins Aerospace? (commercial exposure as it applies to DoD needs) -What technology roadmaps do we have aligned to make this vision a reality? (connected networks, advanced processing, advanced human-machine interfaces and content management) <p>Gladys Yañez (Confirmed) Associate Director Collins Aerospace</p> |
| 11:00-11:30 | Networking Break & Exhibits |
| 11:30 – 1:00 | <p>Detailing How Advances in AI Could Affect the Future of National Security</p> <p><i>The National Security Commission on Artificial Intelligence was established to watch for international developments & trends in AI. They were given the task to determine how the U.S. can stay competitive in the field. Utilizing AI-enabled technologies on the battlefield can have its benefits and challenges. This panel will discuss how the Commission and other task forces on AI are helping to ensure the U.S. can remain the leader in developing and integrating such technologies, and how through close collaboration with the DoD Joint Artificial Intelligence Center (JAIC) and other entities, only the most advanced AI capabilities will be fielded in support of national security& the Warfighter. This panel will feature some of the most innovative minds in AI from tech, national security, & academia.</i></p> <p>Panel Moderator- Lindsey Sheppard (Confirmed) Associate Fellow, International Security Program CSIS</p> <p>Panelists- Honorable Katharina McFarland (Confirmed) Commissioner, National Security Commission on AI Board of Directors SAIC</p> <p style="text-align: right;">www.asdevents.com - www.asdevents.com/event.asp?id=21513</p> |

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| | <p>Ashley Llorens (Confirmed) Chief, Intelligent Systems Center JHU-APL</p> <p>Dr. Herman Herman (Confirmed) Director of the National Robotics Engineering Center Robotics Institute Carnegie Mellon University</p> <p>RADM (Ret.) Brian Losey, USN (Confirmed) Partner Shield.AI</p> |
| 1:00 – 2:00 | Networking Lunch |
| 2:00 – 2:45 | <p>Developing Innovative AI and Autonomous Capabilities to Guide the Evolution of Army Technological Capabilities</p> <ul style="list-style-type: none"> - Leveraging industry, academia, and interagency collaboration to explore and identify future game-changing technologies - Efforts to implement AI & autonomous capabilities to help advance future operations - Current & future programs/technologies of interest <p>Luke Shabro (Confirmed) Deputy Director, Mad Scientist Initiative TRADOC</p> |
| 2:45 – 3:30 | <p>Army Efforts to Leverage Emerging & Disruptive Technologies to Enhance Robotics and Autonomous Systems (RAS)</p> <ul style="list-style-type: none"> - Army perspective towards applying RAS technologies with next generation doctrine and tactical formations - How the CCDC Ground Vehicle Systems Center is using autonomous capabilities to enhance Robotic Combat Vehicle development - Current challenges towards acquiring and inserting autonomous capabilities for operational superiority <p>Dr. Robert Sadowski, ST (Confirmed) Army Chief Roboticist CCDC Ground Vehicle Systems Center</p> |
| 3:30 – 4:15 | <p>Update on DARPA's Explainable Artificial Intelligence (XAI) Program</p> <ul style="list-style-type: none"> - Leveraging machine learning techniques that produce more explainable models, and maintain a high level of learning performance and prediction accuracy - Enabling human users to understand, appropriately trust, and effectively manage the emerging generation of artificially intelligent partners - Enabling third-wave AI systems where machines better understand the environment in which they operate <p>Dr. David W. Aha (Confirmed) Head, Adaptive Systems - Center for Applied Research in AI Naval Research Laboratory</p> |
| 4:15 | End of Summit |