



Statement of Devaki Raj
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Introduction:

Senate Majority Leader Schumer, and Senators Rounds, Henrich and Young, thank you for inviting me to participate in the Artificial Intelligence (AI) Insight Forum. My name is Devaki Raj, and I am the Chief Digital and Artificial Intelligence Officer (CDAO) in the Strategy Office at Saab, Inc. where I lead digital transformation and AI initiatives across the organization. Until a recent acquisition by Saab, I was CrowdAI's CEO and co-founder, a Silicon Valley start-up that worked heavily at the intersection of AI and National Security on notable efforts under Project Maven, the Joint AI Center (JAIC), and the U.S. Navy Task Force 59.

Saab serves the U.S. government, industry, and commercial customers with world-leading products, services and solutions in defense and civil security. Saab has programs in-service and under contract with all branches of the US Armed Forces. At Saab, we are working to make every product smarter, with AI integration at the forefront of technological development.

I offer a perspective on AI and national security from a company that is today integrating responsible AI across our product portfolio to support our mission of keeping people and society safe.

Specifically, from our U.S. headquarters in Syracuse, New York, we are building all-digital radar technologies (ADRT) with the U.S. Navy and U.S. Air Force that allow for finer control and processing using AI. We are also working to integrate computer vision capabilities into our vast air traffic management product portfolio. In Indiana, we are working with Purdue University, DARPA and the U.S. Navy in Third Wave AI research and development and in self-healing autonomy that allows unmanned systems to continue safe operations amidst extreme disturbances in their dynamics.

By executing this vision from our growing Upstate New York and Indiana technology hubs, we are helping to expand the AI development geographical landscape. Ultimately, all of these efforts are aimed at leveraging the power of AI to ensure our customers, the end users at the tactical edge, have the very best capability to make smarter, faster, better decisions to counter adversaries and malign actors that intend to do harm to our forces or societies.

With global headquarters in Sweden, and major operations all over the world, we are part of the domestic defense capability of many allied nations and bring a unique global, national security perspective to this forum. Saab has prioritized AI investments across the globe, including a strong internal research and development focus in AI along with several recent acquisitions and investments in CrowdAI (US), Blue Bear AI (UK), and Helsing (Germany). Saab recognizes the critical need to incorporate AI, responsibly, across our vast global portfolio.

With this global national security perspective, we offer the following discussion points:

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I. Enabling Geographically-Diverse AI Technology Development

The Challenge: The concentration of AI development within a few entities (Silicon Valley), presents risks to national security through the creation of innovation bottlenecks and single points of failure.

Considerations:

- **National AI Research Incentives:** Accelerate nationwide initiatives offering grants and incentives to encourage AI research across a broader range of institutions and geographic locations (ongoing efforts in Upstate New York and Indiana are good examples of dispersing such tech bottlenecks through the establishment of tech corridors).

- **Collaborative AI Development Programs:** Create incentives to foster partnerships between established AI centers and emerging institutions to diversify the AI research landscape. Veteran work exchange programs or internships would be beneficial for better mission alignment and for skillset development.

II. AI Procurement in the Department of Defense (DoD)

The Challenge: The DoD's procurement process is misaligned with the rapid evolution of AI technology, leading to inefficiencies in harnessing AI's potential in national security.

Recent Initiatives: Maven, JAIC, CDAO Tradewinds Solutions Marketplace, Navy TF-59, U.S. Air Force redForce, AFVentures, DIU

Considerations:

- **Diversified Acquisition Model:** DoD should embrace a more flexible acquisition authority. The aim is to increase agility and responsiveness, allowing units that are closer to operational needs to quickly adopt and implement AI solutions that are most relevant to their specific requirements. The US Navy's Task Force 59 is a positive exemplar of this model. The model implies a significant shift in the organizational structure and procurement protocols, granting more autonomy at lower levels for AI technology acquisition.

- **Empowerment for Rapid Prototyping:** Encourage a culture of rapid prototyping and iterative development within the DoD, enabling quicker adoption and integration of successful AI solutions. By the very nature of AI being perpetually in both development and operations, DoD could consider blending O&M and RDT&E funding.

- **Cross-Functional AI Teams:** Form teams combining AI expertise with operational and procurement knowledge to identify and integrate AI technologies effectively.

- **Balancing IP Rights and Collaboration:** Develop guidelines that respect and protect the IP rights of private entities while enabling knowledge sharing and joint innovation.

III. Rigorous AI Testing and Acquisition

The Challenge: AI's dynamic nature requires sophisticated testing and evaluation methods for ensuring reliability and safety in deployment.

Recent Initiatives: Responsible AI Toolkit released last month from CDAO T&E BPA

Considerations:

- **Establishing Data Readiness Scorecards:** To accelerate this process, departments and agencies pursuing AI modernization could compile and then furnish datasets. The National Geospatial-Intelligence Agency, to its credit, for years has been working to curate and redefine how it structures GEOINT data to be machine readable. This is a herculean task for sure, but a necessary one. Similar efforts, across the government, could be started, if not already done, to identify which missions across the enterprise can be machine-augmented.
- **Dynamic Evaluation Protocols:** Establish qualitative and quantitative protocols for comprehensive evaluation of AI technologies. After an AI model is deployed, it should continuously be monitored due to performance changes over time or new data introduction.
- **Adaptive Contractual Frameworks:** Include ongoing adaptation and retraining of AI models in technology contracts.

IV. International Collaboration and AI Alliances

The Challenge: The advancement of AI technologies presents a dual challenge in the international arena--fostering collaboration among allies and navigating the constraints of export controls and arms regulations like the International Traffic in Arms Regulations (ITAR).

Recent Initiatives: NATO's AI policy framework, AUKUS Pillar II

Considerations:

- **Fostering International AI Research and Development:** Encourage international research consortia and partnerships, focusing on collaborative AI projects that align with revised export control guidelines. Support the creation of shared AI development platforms for allied nations, complying with export controls but allowing for cooperative innovation.
- **Enhancing AI Diplomacy and Communication:** Continue to engage NATO and AUKUS to discuss AI policy and export controls, enhancing mutual understanding and trust among nations for AI safety, security, and ethics, guiding responsible AI use worldwide. Consider NATO's AI policy framework, and the recent AI Safety summit in establishing international AI alliances to promote shared principles for responsible AI use and setting global standards.¹

Conclusion

As a global leader in defense and security, Saab understands how AI can enhance our products in powerful ways. Especially in national defense, AI will never fully replace humans but it can

¹ https://www.nato.int/cps/en/natohq/official_texts_187617.htm



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make our decision making smarter and faster, providing critical seconds to potentially save the life of a warfighter.

As we investigate how AI is changing the landscape of our daily lives, we imagine a future where AI is integrated seamlessly and responsibly into national security and beyond. By maintaining a steadfast commitment to ethical AI development and fostering robust public-private partnerships, we can assure the advantageous integration of AI into national security frameworks.

Saab is proud to be a critical part of the U.S. defense industrial base, playing a leading role in developing innovative solutions to protect and defend the American people. Thank you for the opportunity to contribute to this forum.