

# The U.S. Army xTech Program – xTechLive Competition Announcement

## I. Background and Purpose

The U.S. Army invites interested entities to participate in the U.S. Army xTechLive pitch competition, designed for eligible small to medium businesses attending CES 2025 in Las Vegas, NV from January 7-9, 2025. Selected participants will have an opportunity to pitch novel technology solutions to a live panel of U.S. Army and Department of Defense (DoD) subject matter experts (SMEs) and compete for prize money.

The U.S. Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA(ALT)) recognizes that the U.S. Army must enhance engagements with industry by reaching new audiences through innovative platforms such as live pitch competitions at conferences. This initiative aims to: (1) understand the spectrum of 'world-class' technologies being developed commercially that may benefit the U.S. DoD; (2) integrate the sector of non-traditional innovators into the U.S. DoD Science and Technology (S&T) ecosystem; and (3) provide expertise and feedback to accelerate, mature, and transition technologies of interest to the U.S. DoD.

The competition will award up to \$100,000 in cash prizes to selected participants. The U.S. Army xTech Program will host up to 30 pitch presentations over the course of three (3) days at the xTech Program booth during CES 2025. Presentations will be conducted on a first-come, first-served basis, with verification of information provided in the registration form. Registration will take place onsite at the booth. For additional details, please refer to Section IV. **Up to 10 winners will be announced live on the Eureka Park Startup Stage at CES 2025, each receiving a cash prize of \$10,000.**

In addition to non-dilutive cash prizes, participants may have the opportunity to engage with U.S. Army and DoD experts attending CES 2025, receiving valuable feedback on their innovations.

The efforts described in this notice are being pursued under the authorities of Title 10 U.S.C. § 4025 to award cash prizes as described in this announcement.

While the authority of this program operates under Title 10 U.S.C. § 4025, the xTechLive pitch competition may generate interest by another U.S. Army, DoD or United States Government (USG) organization for a funding opportunity outside of this program (e.g., submission of a proposal under a Broad Agency Announcement). The interested organization may contact the participant to provide additional information or ask for a request for proposal in a separate solicitation. Winners of the prize competition may be invited to submit a separate proposal for further development of their proposed technology solution based on the needs of the U.S. Army. The Army may use a contract mechanism of their choice and will notify the participants accordingly.

The U.S. Army xTech Program utilizes the online evaluation and feedback tool, Valid Eval, to accept applications and streamline the evaluation and feedback process. xTech will provide a feedback report to participants following the live pitches that will be accessible through the tool. The purpose of providing this report is to assist in potentially accelerating transition of the technology to an Army end-user by providing insight on best applications for the technology, suggestions for product improvement for Army use and recommended next steps for development. However, the government may not respond to questions or inquiries regarding this feedback.

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## II. Eligibility Requirements

To be eligible for this competition, entities must be a small to medium business attending CES 2025 and must not have previously submitted an Army xTech Program competition application and/or submitted an Army Small Business Innovation Research (SBIR) proposal. A small to medium business is defined as those with <1,500 employees.

Each eligible entity:

- Must be able to obtain a CAGE code (U.S. businesses) or NCAGE code (international businesses) to process payments;
- Shall be incorporated in, and maintain, a primary place of business in the U.S. or a foreign country;
- May not be a U.S. federal or foreign government entity or employ a U.S. federal employee acting within the scope of their employment;
- May not be a company or person controlled by, funded by, or under the jurisdiction or direction of foreign adversaries; and
- Must not be based in a foreign country of concern (FCOC), directly funded by an FCOC-government or FCOC-government-subsidized guidance fund or be under the influence of an FCOC-based government in any way. Failure to meet these requirements will result in ineligibility for award.

**Companies that have previously submitted an xTech competition application and/or submitted an Army SBIR proposal are not eligible to participate in this competition.**

The xTech Program will not provide travel or registration funding for eligible entities to attend CES 2025.

## III. Topics and Problem Statements

The xTechLive pitch competition is seeking novel capabilities and technology solutions that can assist in tackling the U.S. Army's current needs and apply to current U.S. Army concepts across three key technology areas:

- **Artificial Intelligence (AI);**
- **Internet of Things (IoT)/Sensing; and**
- **Robotics.**

Topic descriptions can be found in [Appendix A](#) of this announcement.

## IV. Program Submission and Competition Structure

The xTechLive pitch competition is voluntary and open to all entities that meet the eligibility requirements, noted in Section II. **Only one pitch per eligible entity is permitted.**

All eligible entities will register onsite at the xTech Program booth, number 60653 (subject to change), at Eureka Park at CES 2025 **beginning on January 7, 2025, at 10:00 a.m. PT.** Firms will be asked to pitch the date upon which they have registered. There will be no pre-registration for this event.

To register and be considered for a pitch presentation, eligible entities will be required to fill out a registration form and provide a 60-second elevator pitch of their technology concept, addressing one of the three key technology areas to a member of the xTech Program team

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at booth 60653 at Eureka Park at CES 2025 between January 7-9, 2025.

Onsite registration will be held on:

- Tuesday, January 7, 2025: 10:00 a.m. – 3:00 p.m. PT
- Wednesday, January 8, 2025: 9:00 a.m. – 3:00 p.m. PT
- Thursday, January 9, 2025: 9:00 a.m. – 10:30 a.m. PT

The xTech Program will select up to 30 firms onsite during registration over three (3) days to present their technology concepts to a panel of U.S. Army and DoD SMEs. Selected firms will be required to provide additional information on the Valid Eval registration page to facilitate evaluations.

**All presentations will be conducted in front of a public audience.**

Each firm will have **5-minutes to pitch, followed by 5-minutes for questions and answers with the judging panel.** Firms may bring prototypes and printed materials to share information about their technology concept during their pitch. No presentation software/applications may be utilized.

Presentations will be evaluated and ranked using the following scoring criteria:

		DEFINITION
<b>SOLUTION</b>	SOLUTION DESCRIPTION	Fully describe what you are offering in your solution. Give the audience a solid technical introduction on how your innovation works and what makes it different.
<i>weight 20%</i>	PRODUCT MATURITY	Please give the audience a clear understanding of your innovation's technical maturity. Support that claim as best you can.
<b>COMPETITIVE ADVANTAGE</b>	SOLUTION'S ADVANTAGES	Prove your prospective customers will choose you given limited resources and myriad choices. Have you accounted for indirect substitute products as well as direct competitors?
<i>weight 30%</i>	DEGREE OF INNOVATION	Prove that your solution is truly innovative. How big a departure from existing technical and/or operational approaches is your solution?
<b>COMMERCIAL REWARD VS. RISKS</b>	MARKET SHARE	Define the specific commercial market segment your product addresses. Argue that your innovation will capture significant share within this market segment.
<i>weight 30%</i>	COMPANY'S EDGE	Why will you win? Describe your company's Competitive Edge in the marketplace: Something you do better than anyone else. This might be a intellectual property, unmatched relevant expertise, a novel business model, channel partners, network effects, etc.
<b>POTENTIAL FOR IMPACT</b>	<i>weight 15%</i>	This Dimension is for the Army judges to figure out. It is their job -- not yours!-- to connect the dots and determine how your innovation can impact the Army. If you have direct knowledge of your potential within DoD, please <u>briefly</u> make your case. Otherwise, don't spend your valuable pitch time on this one.
<b>PRESENTATION QUALITY</b>	<i>weight 5%</i>	This is a difficult task -- presenting with little to no notice. The Army gets it! Please do you best to effectively get your message across.

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The xTech Program will select **up to 10 firms** as the final winners of the competition.

Winners will be announced live on the **Eureka Park Startup Stage at CES 2025 on January 9, 2025, at 2:00 p.m. PT** and will receive a **cash prize of \$10,000 each**. All competition participants must be present during the winner announcement to be eligible to receive the cash prize award.

***\*Dates, times and location are subject to change.***

### V. Proposed Schedule

The proposed schedule is outlined below and subject to change without notice.

Date	Activity
January 7, 2025	Registration (10:00 a.m. – 3:00 p.m. PT) Live Technology Pitches (10:30 a.m. – 3:00 p.m. PT)
January 8, 2025	Registration (9:00 a.m. – 3:00 p.m. PT) Live Technology Pitches (9:30 a.m. – 3:00 p.m. PT)
January 9, 2025	Registration (9:00 a.m. – 10:30 a.m. PT) Live Technology Pitches (9:30 a.m. – 10:30 a.m. PT)
January 9, 2025	Winners Announced Live (2:00 p.m. – 2:30 p.m. PT)

### VI. Prize and Incentives

Prizes will be offered under 10 U.S.C. §4025 (Prize Competitions). The total prize pool is \$100,000.

Phase	Winners	Prize
Live Technology Pitches	Up to 10	\$10,000 each
	Total	\$100,000

### VII. Disclaimers

Registered participants shall be required to assume any and all risks and waive claims against the U.S. Federal Government and its related entities, except in the case of willful misconduct, for any injury, death, damage, or loss of property, revenue, or profits, whether direct, indirect, or consequential, arising from their participation in this prize competition, whether injury, death, damage, or loss arises through negligence or otherwise.

### VIII. Intellectual Property

The U.S. Army is a strong proponent of deliberate intellectual property (IP) rights and management by the private sector and U.S. DoD. For the xTechLive pitch competition:

- The U.S. Federal Government may not gain an interest in IP developed by a participant without the written consent of the participant;
- Nothing in this xTechLive prize competition shall diminish the U.S. Government's rights in patents, technical data, technical information, computer software, computer databases, and computer software documentation that the U.S. Government had prior to this xTech live prize competition, or is entitled to, under any other U.S. Government

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- agreement or contract, or is otherwise entitled to under law; and
- The U.S. Federal Government may negotiate a license for the use of IP developed by a registered participant in the prize competition.

### **IX. Point of Contact**

The U.S. Army xTech Program Office

Office of the U.S. Army Deputy Assistant Secretary of the Army, Research and Technology

Email: [usarmy.xtech@army.mil](mailto:usarmy.xtech@army.mil)

Website: <https://www.xtech.army.mil/>

### APPENDIX A – Problem Statement Descriptions

**AI:** AI is a powerful and growing technology that can transform the military domain in unprecedented ways. The U.S. Army is embracing and leveraging AI in all aspects of its activities, from intelligence and surveillance to logistics and combat, to training and education. By doing so, the U.S. Army aims to maintain its competitive edge, enhance its operational effectiveness, and ensure its national security and defense. As one of the leading forces in the world, the U.S. Army is actively pursuing the development and integration of AI to enhance the speed, accuracy, and efficiency of various processes and operations.

The Army **will consider proposals on any AI solution** but will prioritize submissions that address one or more of the following critical needs:

- **Biometrics:** Biometric technology measures and analyzes human biological and behavioral characteristics for identification and authentication purposes. Biometrics can be used for various defense-related applications, such as access control, target differentiation, and identity verification. Within the field of AI, biometrics leverages advanced algorithms and machine learning techniques to enhance accuracy, speed, and reliability in recognizing individuals. The U.S. Army seeks solutions that can enhance the usability of biometric systems for military use cases, as well as address the ethical and privacy issues associated with biometric data.
- **Cyber Defense:** Cyber Defense involves protecting computer systems, networks and data from digital attacks and unauthorized access. The integration of AI into cyber defense enhances threat detection, response and overall security posture. These cyber threats include malware, ransomware, phishing, and denial-of-service attacks. Cyber Defense is also increasingly being used to protect Generative AI models from adversarial AI attacks. The U.S. Army is looking for solutions that can improve the detection, prevention, and response capabilities of AI-related cyber defense systems.
- **Robotic Process Automation:** Robotic Process Automation (RPA) is the technology of automating repetitive and rule-based tasks by using software robots or digital workers. When integrated with AI, RPA can handle more complex tasks that require decision-making and cognitive abilities. In combat, RPA can also help automate routine communications and data reporting, allowing warfighters to focus on mission-critical tasks. The U.S. Army seeks solutions that can enhance the efficiency, scalability, and intelligence of RPA systems.

**IoT/Sensors:** The U.S. Army is seeking solutions for collecting and sharing data in contested and/or low-bandwidth environments. Often, sensors collect data and then transmit it to another location that has higher compute power for advanced data processing (e.g., applying AI algorithms). However, future conflicts are expected to involve significant jamming and degradation/denial of communications. Sensors and IoT devices must be able to leverage multiple communication pathways for data transmission to be successful in these environments.

The U.S. Army **will consider proposals on any IoT or Sensors solution**, but will prioritize submissions that address one or more of the following needs:

- Sensors with onboard data processing to efficiently pre-process raw data and prioritize the most important data for transmission.
- Sensors with a low probability of intercept and/or low probability of detection (LPI/LPD) by adversaries.

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- Networking solutions to enable rapid data sharing between IoT devices (e.g., sensors, autonomous platforms, control systems, etc.) in contested environments.

**Robotics:** The U.S. Army is actively seeking innovative solutions in robotics and robotic components to support warfighter efforts in contested environments. The modernization of warfare necessitates the development and deployment of advanced robotics to effectively counter foreign adversaries. These robotic systems are crucial for both assisting warfighters and operating autonomously, thereby minimizing or eliminating risk to our soldiers. To ensure success, robots must be capable of performing tasks and achieving objectives traditionally carried out by warfighters.

The U.S. Army **will consider proposals on any robotics or robotic component solution** but will prioritize submissions that address one or more of the following critical needs:

- **Manned and Unmanned Teaming:** Technologies that enable seamless integration between manned and unmanned systems in both air and ground operations are vital. For example, scalable sensors and advanced communication systems allow soldiers to control or collaborate with unmanned ground vehicles (UGVs) in complex terrains, enabling safer and more efficient operations during reconnaissance missions or urban warfare scenarios.
- **Real-Time Data Labeling and Processing:** Autonomous systems that can label and process data in real-time are essential for making split-second decisions in the field. For instance, an unmanned aerial vehicle (UAV) equipped with this capability can identify potential threats, analyze terrain, and update navigation paths on the fly, significantly enhancing the warfighter's situational awareness and reducing response times in dynamic combat environments.
- **Reconnaissance (Electronic and Visual):** Unmanned systems that excel in electronic and visual reconnaissance provide invaluable intelligence while minimizing exposure. A UAV that can covertly survey enemy positions, gather electronic signals, and transmit this data back to command centers offers a strategic advantage by allowing forces to plan and execute operations with greater precision and safety.
- **Autonomous Logistics and Manufacturing Technologies:** Robotics that manage autonomous logistics and enable advanced manufacturing processes can revolutionize how supplies are produced and distributed in wartime. For example, autonomous ground vehicles (AGVs) can transport supplies across dangerous terrain without human intervention, while robotic manufacturing units in the field can produce critical components, such as replacement parts for vehicles or weapons systems, ensuring that warfighters have access to necessary resources even in isolated or contested areas.
- **Sustained Operational Efficiency:** Robotics that optimize resource use and ensure the continuous availability of supplies can enhance operational endurance. For instance, autonomous resupply drones can deliver ammunition, medical supplies, or food to forward-deployed units, reducing the need for risky convoy operations and extending the operational reach of warfighters in the field.