

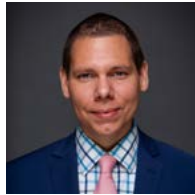


TECH | CONNECT

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MESSAGE FROM THE DIRECTOR



Today, we live in a world where technology is advancing at a rate faster than ever before in human history. The tools and technologies developed have literally changed the landscape in which we live and operate from only a generation before. The need to adapt and modernize is real in every facet of the marketplace, and the U.S. Army is no different. To help achieve the Army's mission of identifying transformative technology solutions to help solve Army

challenges, we launched the Army xTech Program in 2018 with the goal of understanding the spectrum of technologies being developed in the commercial market and how we can utilize those solutions to solve Army problems. The xTech Program is one of the most unique programs in the Army, forging new partnerships with non-defense businesses from across the globe through various competitions that offer cash prizes, transparent and detailed feedback, direct access to key stakeholders within the Department of Defense (DoD) and various opportunities where businesses will receive mentorship, education and networking as they progress through each phase.

We bring real experts from across the Army's Science and Technology (S&T), Acquisition, Testing and Warfighter communities to evaluate and provide various perspectives on to each individual solution; we listen to the feedback from participants and evaluators, continuing to improve our processes; and we consistently grow our ecosystem of companies to increase collaborations across the DoD and non-defense communities.

The xTech Program has evolved over the years to expand on the opportunities being provided to applicants. We have restructured our competitions to allow for follow-on contract awards and agreements with DoD organizations to continue working with businesses on the development of their solutions.

Our program offers a variety of competitions ranging from our most popular open-topic competition, xTechSearch, to topic-focused competitions targeting specific areas of need within the Army. Our mission is to break down the barrier to entry, identify technology solutions that can impact the Army's needs, continuously grow our ecosystem, and stay at the forefront of emerging tech. With this, we can continue tackling our most critical challenges yet, arming our Warfighters with technology needed to defend our country and the countries of our allies. I hope you enjoy learning about our innovations – past, present, and future – and encourage you to reach out to our team to learn more!

For More Information:

Website

www.xtechsearch.army.mil

Email

usarmy.pentagon.hqda-asa-alt.mbx.xtechsearch@army.mil





IN THE NEWS

The xTech team has been hard at work breaking down the barriers between small businesses and the Army. With several competitions in various stages of completion and updates frequently being released on the xTech social media channels, it can be easy to miss the occasional highlight. Select from the links below to learn about recent xTech competitions, xTech Alumni successes, and more about what the program has been up to this year!

- ▶ xTech Innovation Combine Advanced Energy Storage Winners Announced at Advanced Technology Summit
- ▶ Army Prize Competition, xTech, Partners Innovators with the United States Army
- ▶ Army's xTech Program Breaks Prize Competition Misconceptions for Tech Innovators
- ▶ xTech Leadership Speaks with Army Research Lab About Winning Army Contracts – Podcast
- ▶ All Things Small Business: Dr. Matt Willis on Army Prize Competitions – Podcast
- ▶ Army Researchers Partner with xTechSearch 3 Finalist, Syncopated Engineering, to Enhance Communication
- ▶ xTech Leadership and Alumni Participate in Lab to Commercialization Panel at Advanced Technology Summit
- ▶ xTechSearch 3 Winner, TRX Systems, Delivers Dismount NAVWAR Threat Mapping

JUDGES CORNER



DR. STEPHEN LEE

Dr. Stephen Lee is currently serving as the U.S. Army Research Office Senior Scientist for Interdisciplinary Science. He has been awarded the Army's Greatest Invention twice for his work in the development of sensors. In 2008, Dr. Lee was awarded the Ten Outstanding Young Americans Award from the U.S. Jaycees and in 2011 a Presidential Rank Meritorious Award. Most recently, Dr. Lee earned a 2020 Theodore Roosevelt Government Leadership Award in the Defenders category.

Q: How did you get involved with the xTech Program?

When xTech was created, I was very excited to see a program that aligned with my own personal interests in concepts for identifying new technologies and new operational capabilities. I volunteered immediately to participate as a Judge when the first xTech solicitation went out and have been involved ever since.

Q: How many xTech competitions have you participated in?

It's hard to keep track of, right? We're in xTechSearch 6 now! I've been involved since the xTechSearch competition launched in 2018 and have participated as a Judge for various parts of the competition – from the Concept White Paper to Semifinals and Finals.

Q: What part of the Judging process do you enjoy the most and why?

I enjoy the entire process of Judging – from the initial reviewing of the proposals, to participating in the technology pitch events, and moving on to the Finals.

I really like seeing the broad representation of ideas submitted that we might not have looked for in the Army before. It's exciting that a company can submit a proposal about their novel idea and how they think it can impact the Army without having any previous DoD business partnerships.

What I enjoy the most is watching the participants and their technology develop throughout the duration of the competition. It really gives me a better understanding of where the technologies might fit within various Army programs.

Q: Why would you recommend participating as a Judge in the xTech Program?

I highly recommend participating as a Judge. It enables you to contribute individually to the development of new capabilities and new technologies for the Solider.

It's also a great opportunity to grow your own personal knowledge of ideas that are out there and to see solutions for problems you're familiar with in your work.

If you are interested in being added to the xTech Judging Pool for future opportunities, please [click here](#).

ALUMNI CHAT: TEXPOWER

TexPower started its small business in 2019 out of the University of Texas at Austin after discovering the financial and environmental benefits of developing an alternative for expensive, cobalt-reliant batteries.

“The cathode is the most expensive part of the battery. It generally has a lot of cobalt, which is a huge problem for sourcing because it’s primarily found in Africa. It’s expensive, toxic, and has a supply chain controlled by China,” said Evan Erickson, Co-Founder, and CEO of TexPower.

Seeking an alternative to this costly and dangerous element, TexPower developed a cathode material that is cobalt-free, making it higher in energy than current cathodes, more affordable, and works immediately with current lithium-ion battery technologies.

Even with the initial development of a technology that could benefit a variety of sectors and applications, TexPower faced numerous hurdles during this initial phase that could have potentially jeopardized their progress. Enter: the xTech Program.

“xTech was fundamental to our existence; overall, it was just a really great experience.”

Evan Erickson, Co-Founder, and CEO of TexPower

TexPower initially applied to the xTechSearch 3 Competition, for which they were selected as a top ten (10) Finalist. Following their award, TexPower went on to improve upon their technology and applied for the xTech Innovation Combine competition in 2020, for which they were selected as one of two (2) Grand Prize Winners and received \$300K in an Other Transaction Authority (OTA) agreement.

Outside of the initial monetary benefit that serves as a lifeline for small businesses looking for capital to establish and grow their company, Erickson was struck by the impact of the connections made through competing in an xTech competition. Following their participation in xTechSearch 3, TexPower received U.S. Department of Energy (DoE) Small Business Innovation Research (SBIR) Phase II Funding for principal research and development efforts.



“For the DoE SBIR, transitioning from the first phase to the second is a big deal, with \$1.1M in funding. Our participation in the xTech Accelerator pushed us to do customer outreach and ask for letters of support, which felt uncomfortable to us because we’re scientists used to the lab, not asking for things. Usually, a company needs a letter of support from one company for Phase II commercialization plans, and they kept urging us to call and get out of our comfort zone. We ended up receiving nine (9) letters of support for that application and that was because of the xTech mentors – they lit a fire under us.”

The growth of their internal network only increased from there. “The xTech Program was pivotal in providing tangential experience and developing business experience. When we applied to the Innovation Combine, we already had some data we were working on for an ultra-high-energy cathode that is cobalt-free, and we partnered with 24M, who we met on the Boston trip for the xTech Accelerator. We had a really good meeting with 24M in Boston and that’s how we got involved with them, and it’s been going very well. That’s all sparked and spiraled from xTech and the Accelerator. It’s been fundamental to us.”

A year has passed since the Innovation Combine in July 2020 and TexPower now finds itself in scale-up mode with their technology and shows no signs of slowing down. Ultimately, Erickson and his team credit the xTech Program as integral to the connections and financial support that has kept TexPower growing and evolving to remain competitive in a fast-paced market.

“xTech was fundamental to our existence; overall, it was just a really great experience.”

HOW IT WORKS



UPCOMING COMPETITIONS & EVENTS

Here's a look at some of the current xTech competitions at various stages of the program lifecycle. Check in with the xTech website periodically to see if winners have been announced!

TECH | BOLT

The top five Finalists from the xTechBOLT Challenge have been invited to conduct an in-person Proof-of-Concept Demonstration to a panel of Army subject matter experts and the public at the 2021 I/Interservice/Industry Training, Simulation and Education (ITSEC) Conference in Orlando, Florida at the end of November.

TECH | SEARCH 6

xTechSearch 6 is the latest iteration of xTech's highly successful open-topic competitions, which launched on July 30, 2021. The 50 Semifinalists were awarded \$5K in cash prizes and will move forward to the Technology Pitches, which will take place in November 2021.

TECH | HBCU

xTechHBCU, which serves Historically Black Colleges and Universities and Minority Serving Institutions (MSI), launched on August 10, 2021 and is currently in Phase II of the competition. Submissions covered a variety of topics, including Knowledge Systems, Computing Sciences, Life Sciences, Physics, Computational and Information Sciences, and Human Research and Engineering. Ultimately, three winners will be selected and awarded a cooperative agreement (or similar) of up to \$150k and will receive a cash prize of \$25K.

TECH | PLUGFEST

xTech Plugfest, sponsored by the Program Manager, Positioning Navigation & Timing (PNT) and the Army Combat Capabilities Development Command (CCDC), Command, Control, Computers, Communications, Cyber, Intelligence, Surveillance and Reconnaissance (C5ISR). The final event will take place at the Open Innovation Lab (OIL) from November 8-19, 2021.

For status updates on these competitions and more, visit the xTech website.



FOR MORE INFORMATION:

Website: www.xtechsearch.army.mil

Email: usarmy.pentagon.hqda-asa-alt.mbx.xtechsearch@army.mil