READINESS INNOVATION CHALLENGE
AUGUST-OCTOBER 2022

PROBLEM STATEMENT

To advance TechConnect's 25+ years of engagement around modeling and simulation development, as well as align with federal priorities, Advanced Technology International ran an in-house Challenge focused on topics including: gaming technology, synthetic environments, human immersion, AR/VR innovations, medical MS&T, emerging data analytics, AI/ML integration, complex-domain systems, and experimentation and validation. They ultimately sought transformative modeling, simulation, and training innovations representing state-of-the-art solutions for both civilian and national security applications.

OUTCOME & RESULTS

TechConnect attracted 116 qualified entries and, of those, engaged 18 finalists to pitch at Defense TechConnect Innovation Summit in Washington, D.C. To promote growth, ATI awarded $50,000 to five winners, which included:

» **Circle Optics:** A novel technology that produces 360° video for VR training and synthetic environments by stitching multiple camera feeds into a single, cohesive, panoramic video.

» **Grayscale AI Ltd:** A virtual simulation platform for artificial intelligence (AI) spatial awareness training for low-SWaP (size, weight, power) platforms, such as drones, with tracking and mapping in real-time at the computer edge.

» **Johns Hopkins University/Surgeon MR:** An interactive software platform that uses real-time augmented reality guidance to help surgeons safely perform their procedures.

» **Neuro Rehab VR:** An immersive virtual reality system for rehabilitation designed to expedite patients' physical therapy recovery by increasing engagement and making therapy fun and functional.

» **SimWerx:** A multi-modal medical simulation training that rapidly scales and improves multi-casualty prolonged care training for geographically dispersed teams in austere environments to maximize instructor capabilities, training effectiveness and real-world situational awareness for complex casualty care.

TechConnect was happy to recruit non-traditional innovators to engage with consortia and ultimately serve the nation.

---

116 ENTIRES

18 FINALISTS

69% NON-TRADITIONAL

$50,000 FUNDS AWARDED

29% TRL 7+

15% WOMAN-OWNED

33% SBIR FUNDED

20% TRL 3

9 COUNTRIES

16% AI/ML INTEGRATION INNOVATIONS

5 WINNERS

20% AR/VR INNOVATIONS

29 STATES

29% MINORITY OWNED

TechConnect *a division of* ATI ADVANCED TECHNOLOGY INTERNATIONAL

ATI ADVANCED TECHNOLOGY INTERNATIONAL