

PSCR 2021

THE DIGITAL EXPERIENCE

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NIST





PSCR's PULSE Accelerator

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*** Please note, unless mentioned in reference to a NIST Publication, all information and data presented is preliminary/in-progress and subject to change**

PULSE ACCELERATOR



WHY THE PULSE ACCELERATOR?

Early R&D

Technology
Available to Public
Safety

PSCR's Impacts

- Transforming public safety's operational capacity
- Create new public safety applications
- Develop measurement tools



MEET THE PULSE TEAM



Tipping Point Solutions:

- A respected media company to brand and market the accelerator at a level consistent with the reputation and expectations of NIST PSCR
- Track record of success working with NIST PSCR
- Key roles: to attract high-quality applicants, to support engagement of prospective technology transfer partners for the companies including through execution of a final event, and to assist on participant pitch presentation media



Boulder SBDC Foundation:

- The “engine” of the virtual accelerator content
- Track record of ten years producing technology accelerators with dozens of companies including success migrating to an online experience in 2020
- Under U.S. Small Business Administration (SBA) governance; named best Small Business Development Center (SBDC) in the nation in 2018 – awarded SBA’s “Center of Excellence & Innovation” -- in part due to these accelerators

NIST PSCR Accelerator Program Design

		1	2	3	4	5	6	7	8	9	10	11	12	
IN THE	COHORT	SME/Cohort Topic Discussions (Strategic Business Development, Non-Dilutive Capital, Legal, Government Contracting)												The Accelerator uses a multi-prong approach that combines an “In the Cohort” group experience with “in the Venture” customized consulting, research and guidance for the individual business.
		Collaborating Peer-to-Peer Solutions												
		Ongoing Pitch Prep & Role Play												
		Market Research, Customer Discovery, Value Proposition												
OUTCOMES + DELIVERABLES														
IN THE	VENTURE	Discovery Meetings												RESEARCH & ANALYSIS REPORT
		Research & Analysis												
		Clarification Meetings												
		Customer Discovery												CUSTOMER DISCOVERY REPORT
		One-on-One Consulting, Custom-fit to Each Venture										MANAGEMENT TEAM STRATEGY PLAN		
		Business Model Canvas												
		Pitch Prep												FINAL PRESENTATION

MEET THE PULSE WAVE COMPANIES



ADVANCED AIRCRAFT COMPANY, LLC

Advanced Aircraft Company (AAC) is an aeronautical engineering and aircraft manufacturing company based in Hampton, VA. AAC produces vertical takeoff and landing (VTOL) unmanned aerial systems (UAS) targeting commercial, government, and military markets.



BIO1 SYSTEMS INC.

Bio1 Systems streamlines the process of clinical data capture and transfer during pre-hospital, en route, and in hospital care. Through AI-driven technology, Bio1 Systems' custom hardware and software platform manages modern triage and patient transfers using automatic object detection (AOD), automatic speech recognition (ASR) with natural language processing (NLP), and AI-driven predictive analytics and decision support to perform hands-free clinical assessments.

MEET THE PULSE WAVE COMPANIES



DIAMOND AGE TECHNOLOGY

Diamond Age Technology develops intelligent spatial computing applications at the intersection of artificial intelligence and virtual/augmented reality. Their primary technologies are in virtual reality training, augmented-reality procedures, rapid virtualization of real-world assets into digital twins, and visualizing complex scene information for high-stakes decision makers.



HAPLY ROBOTICS

Haply Robotics is a company on a mission to create beautifully designed products with leading-edge mixed reality technologies to blur the lines between the physical and digital worlds. Simulation is forever changing the way the world will learn, train, and entertain ourselves and the successful integration of our sense of touch is at its core. Haply builds the interfaces that will pave the way for a physical-virtual future.

MEET THE PULSE WAVE COMPANIES



NEXR LLC

The NeXR team combines expert VR/AR developers, training SMEs and Public Service Commission veterans to create industry-leading custom training modules designed to drastically improve operations, lower costs and improve your workforce.



PEAK RESPONSE

Peak Response is focused on improving public safety with modern technology and user-centered design. Their first software product addresses coordination during mass casualty incidents (MCIs) with advanced technologies like speech-to-text. Using their software, patient data collected by first responders across the scene is automatically uploaded to provide a live bird's-eye view for the incident commander and others managing the scene strategy.

MEET THE PULSE WAVE COMPANIES



QUANTASTAT

QuantaSTAT is leading the way to a healthier tomorrow by creating transformative technology to improve the lives of everyone through better HIPAA compliant medical response technology. The QuantaSTAT platform provides the ability to track real-time health, location, and status of patients and assets—anytime, anywhere, instantly, and securely.



RETHINK SOLUTIONS LLC (DBA APOLLO AI)

Apollo is a hands-free, smart voice assistant designed for emergency medical personnel, firefighters, law enforcement officers, and dispatchers. Apollo improves first responder efficiency, safety, and individual well-being while strengthening community relations by enabling access to advanced analytics, real-time data, and hands-free voice access to essential routine functions.

MEET THE PULSE WAVE COMPANIES



SPECTRONN

Spectronn's artificial intelligence (AI) software platform understands the video content and automatically generates a story in plain English. A conversational chatbot mobile App then enables first responders to ask questions and get answers from the generated story. Video analytics computations are dynamically distributed over the mobile edge and cloud for wireless bandwidth and latency minimization.



VENTI LLC

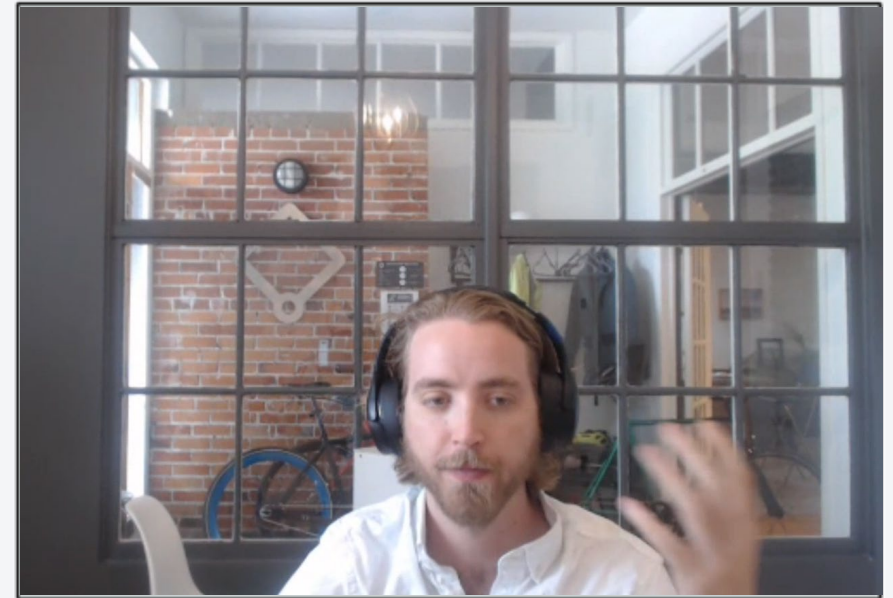
Venti's Intelipod® system provides an advanced network of sensors across a broad spectrum of critical data elements (temperature, atmospheric pressure, humidity, vibration, volatile organic compound (VOC) detection, and geo-location) and integrates them into an actionable, common operating, real-time situational awareness and a record for post-event forensics.

**WHAT HAS BEEN THE MOST
REWARDING ASPECT
ABOUT PARTICIPATING
IN PULSE?**

MOST REWARDING ASPECT



Spectronn



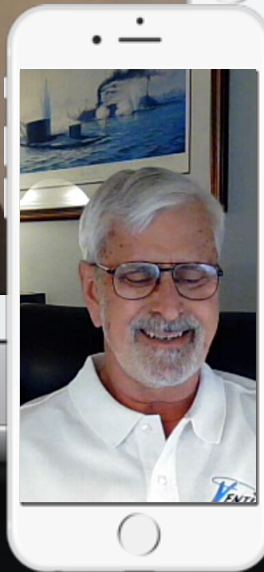
Haply Robotics

HOW HAS YOUR BUSINESS GROWN/PIVOTED?

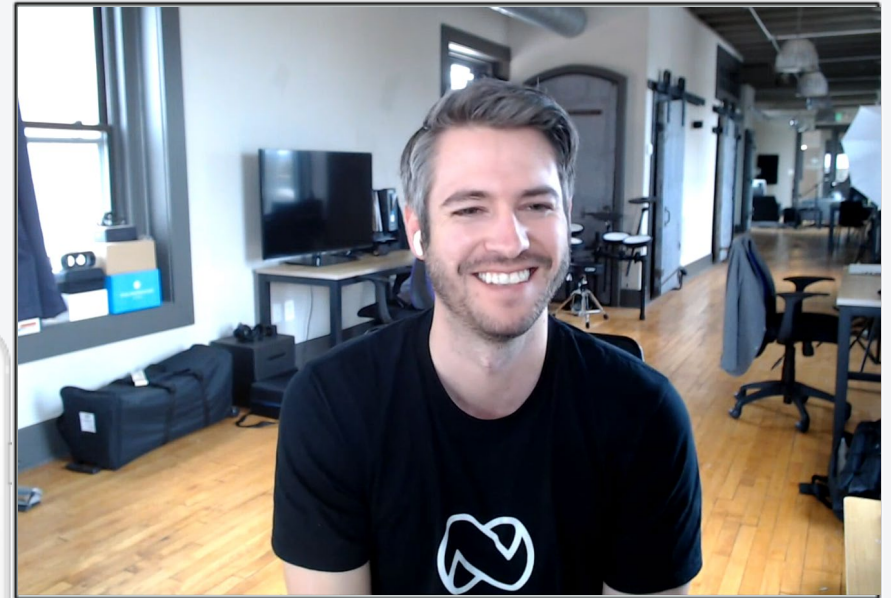
MY BUSINESS HAS GROWN/PIVOTED



Peak Response



Venti LLC



NeXR

**WHAT HAVE YOU LEARNED
MOST THROUGH YOUR
INTERACTIONS
WITH PUBLIC SAFETY
AS PART OF PULSE?**

LEARNED FROM PUBLIC SAFETY INTERACTIONS



QuantaSTAT

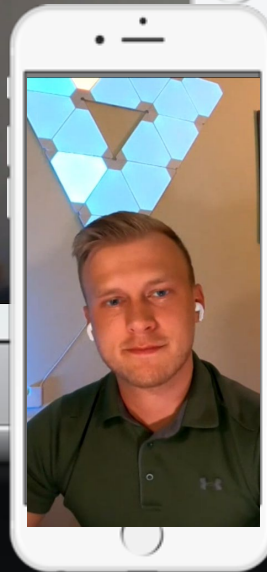
Diamond Age Technology

**WHY SHOULD A BUSINESS
APPLY TO PARTICIPATE IN OR
A PSCR STAKEHOLDER SHARE
THEIR EXPERTISE WITH THE
PULSE ACCELERATOR?**

WHY PARTICIPATE?



Advanced Aircraft Company



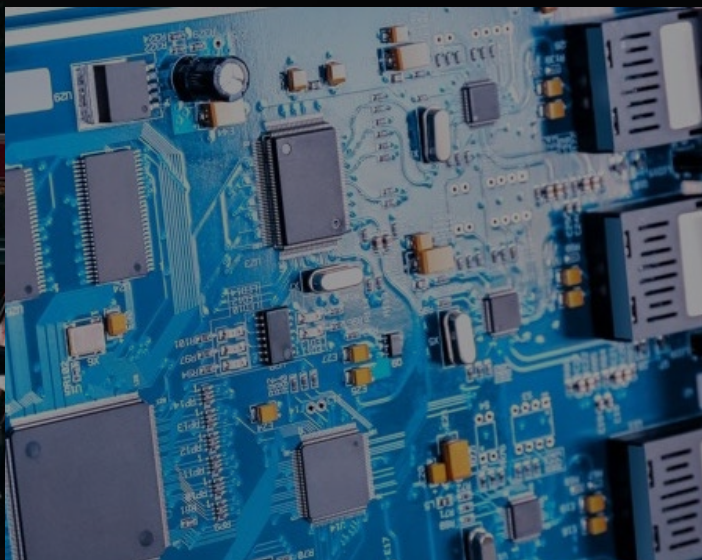
Apollo AI



Bio1 Systems

**MEET THE PULSE
WAVE PARTICIPANTS
IN THE TECH DEMOS**

SENDING A PULSE TO INNOVATION IN PUBLIC SAFETY



NOW RECRUITING FOR
ROUNDS 2 AND 3!



pscr.@nist.gov



thepulseaccelerator.com

A firefighter in full protective gear, including a helmet and SCBA, is shown from the chest up. The helmet has a digital overlay on the visor, displaying a blue circular interface with various gauges and data. The firefighter is wearing a blue jacket with yellow reflective stripes. The background is dark.

THANK YOU

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