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Peraton Labs Overview

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About Peraton

- Impacting missions of consequence across the globe…
  - National intelligence collection, analysis & dissemination
  - Full spectrum cyber operations and information dominance
  - Space protection & resiliency
  - Secure, resilient global communications
  - Border and maritime security platforms
  - International coalition strike platforms
  - Hypersonic weapons
  - Foreign Affairs
  - Citizen health and safety
  - Mission-based enterprise IT modernization
- …and deep into the far reaches of the galaxy
  - Human space exploration

~18,000	~50%	20%	70
Employees	Cleared employees ~16% TS/SCI	Military Veterans	SCIFs (53 accredited, 17 under construction)

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Peraton Labs Overview

Peraton Labs delivers the future across cybersecurity, communications, mobility, electronic warfare, and analytics to government and commercial customers worldwide

- Organization created in 1984 after the breakup of AT&T and Bell Labs, expanded with the addition of DHPC Technologies, and acquired by Peraton in 2021
- Long tradition of developing innovative technologies
- Extensive research collaborations with elite universities and leading-edge companies and startups
- Leadership positions in 20+ standards bodies and professional organizations

480
scientists, engineers and analysts on staff

25%
of our technical staff are patent inventors

50%
of technical staff with master's; 30% PhDs

75%
of our technical staff hold gov't clearances

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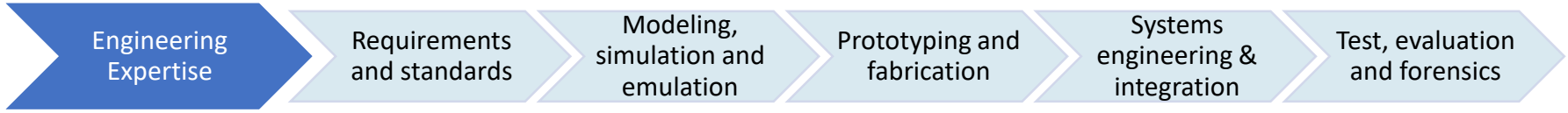
Technical Capabilities Summary

- Majority of staff located in multiple sites in NJ, MD and VA, including:
  - -- Basking Ridge, NJ
  - -- Picatinny, NJ
  - -- Aberdeen, MD
  - -- Silver Spring, MD
  - -- Fort Belvoir, VA
- Facility in St. Louis for Display Technologies

- Markets served:
  - -- Defense & intel
  - -- Civilian agencies
  - -- Utilities
  - -- Transportation
  - -- Life sciences

Cyber-security	Electronic warfare	Machine learning and AI	Mobility & wireless systems	Sensors & sensor integration	Optics, photonics & quantum	Networks and operations
Cyber defense and cloud security	EO/IR/RF technology	Machine learning techniques	High performance RF comms	Sensor / laser instrumentation	Optics and optical networking	Network control and service mgmt
Cyber warfare	Attack, protect and counter-measures	Adversarial Machine Learning	Signal processing applications	Spectrum sensing and management	Photonics system design and integration	Network architecture and protocols design
Critical infrastructure protection	Threat detection	Data correlation, fusion and integration	Wireless network management and security	Systems architecture and sensor integration	Applications of advanced laser-based technologies	Software defined networks
Vulnerability and risk assessment	Counter-IED/UAS	Cyber and wireless analytics	Secure mobile comms	Controls and automation	Quantum comms and computing	Network virtualization



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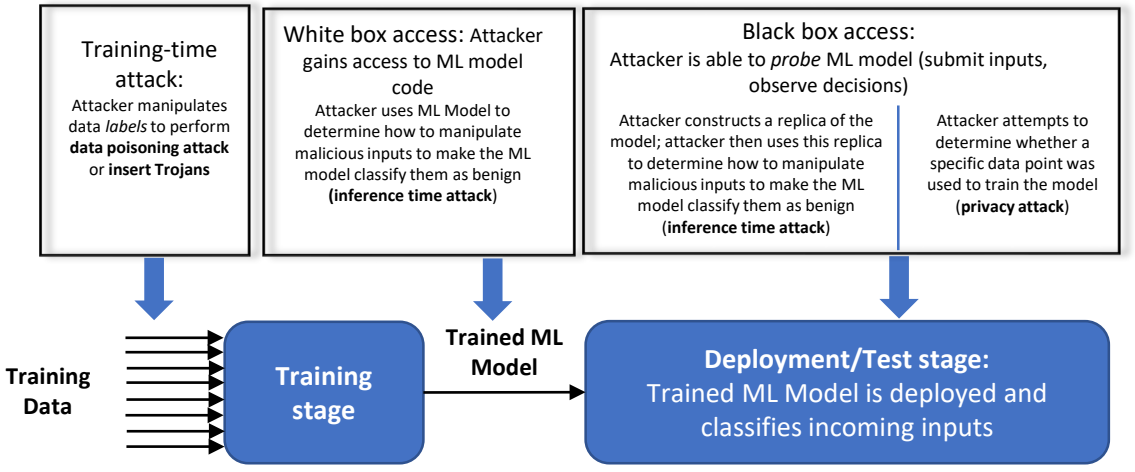
Peraton Labs has a long tradition of R&D leadership for Government agencies

- Top performer at DARPA
  - Large number of ongoing programs in I2O and STO, e.g.:
    - LINC, CHASE, OPS-5G, GARD, REPO, D3M, RACE, ConSec, FastNICs, SDCPS (I2O)
    - CONCERTO, DyNAMO, LogX, Network UP, SHARE, MINC (STO)
    - Multiple classified efforts (I2O and STO)
  - Other: SAFE-SiM (ACO), CODE, TMVD (TTO)
- Prime performer on IARPA Trojan AI, COVID-19 seedling program
- Multiple large ongoing programs with Army agencies, e.g., DEVCOM C5ISR Center, DEVCOM Army Research Lab

Summary of Peraton Labs Adversarial ML Research

Research Focus

- All areas of AML (attacks and defenses), including:
  - Training stage data poisoning attacks
  - Test stage inference attacks
  - ML privacy: model inversion, membership attacks
  - AML Assessment: Assess models for vulnerabilities
- Modalities: image, video, audio, RF, text, cyber



Focus of related Peraton Labs research programs:

- **IARPA** TrojAI: Identify AIs with "Trojan" triggers embedded in the training data, given only the AI
- **DARPA** TMVD (Techniques for Machine Vision Disruption): Develop techniques to disrupt neural net-based computer vision technology by adding imperceptible "noise" patterns to images.
- **C5ISR Center** Autonomous Cyber Defensive Operations: Develop a framework for AML assessment
- **ARL** Cyber CRA**:** Develop theoretical robustness guarantees, defenses against adversarial manipulation of cyber attack data
- **NGA** Boosting Innovative GEOINT (BIG): Privacy Vulnerabilities in Machine Learning
- **DARPA** GARD (Guaranteeing AI Robustness against Deception): Develop theoretical framework and defenses against adversarial attacks on machine learning algorithms
- **IRAD:** Demonstrate techniques for disrupting reactive jamming.

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Contact us!

- We are looking to add strong partners to our team with strengths in:
  - Speech analysis
  - AI-based voice generation

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