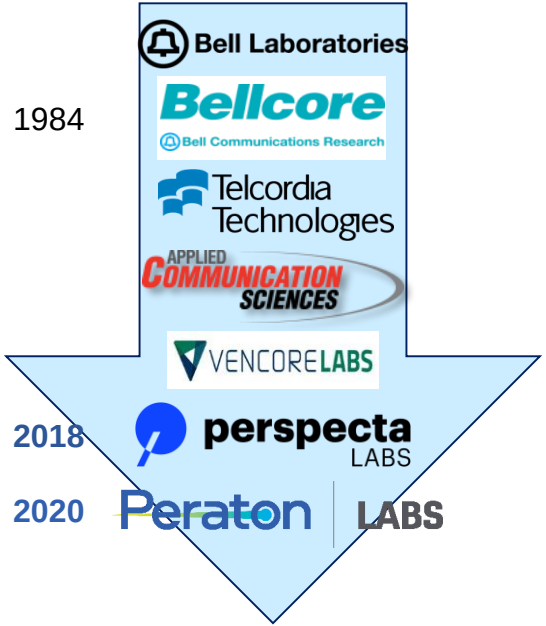
Peraton Labs: Company background



- **400+ scientists & engineers**
- **55% hold Ph.D.'s**
- **50% hold one or more patents**
- **74% hold government clearances**
- **Corporate Headquarters**:
  150 Mount Airy Road, Basking Ridge NJ

Capabilities

- **Machine Learning** - Invented:
  - Learning Using Privileged Information (LUPI): Expedite learning through training-time data enhancement
  - Synergy Learning: Merge outputs of multiple classifiers to produce reliable confidence metrics
  - Learning Using Statistical Invariants (LUSI): augmenting data-driven machine learning models with human-derived knowledge
- **Natural Language Processing**
  - Latent Semantic Analysis: invented LSI, applied to cross-language retrieval
  - Innovative NLP solutions: devised and implemented multiple high-performance information-extraction, question-answering, and knowledgebase-population systems
- **Constraint Solvers**:
  - Applications of SAT, SMT solvers in diverse domains including configuration management, cyber physical systems design
- **Ad-Hoc Communications**:
  - Enhance collaborative autonomy and network robustness via dynamic healing, on-demand asset positioning
  - Distributed situational understanding using fusion, jamming detection+mitigation, reliable information delivery

Experience

- Seasoned performer on numerous relevant programs
  - IARPA
    - COVID-19 Seedling
    - Knowledge Discovery and Dissemination
    - Trojans in Artificial Intelligence
  - DARPA
    - Probabilistic Programming for Advancing Machine Learning (PPAML)
    - Guaranteeing AI Robustness Against Deception (GARD)
    - Configuration Security
    - Data-Driven Discovery of Models (D^3M)
    - Constructive Machine-learning Battles with Adversary Tactics
    - Cyber-Hunting at Scale
    - Leveraging the Analog Domain for Security (LADS)
  - ARL
    - Cyber Security CRA
  - SEC
    - QRADS: Application of NLP/ML to regulatory filings
  - Commercial
    - Clinical trial knowledgebase population for pharma
    - Automated redaction of PII

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