

- Name of Organization: Palo Alto Research Center (PARC)
- Lead Investigator: Diana Smetters
- Current Team Members:
  - Richard Chow: security architecture
  - Nathan Good: user-centered design, usable security, ethnography
  - Philippe Golle: cryptography, applied machine learning
  - Markus Jakobsson: fraud/malware prevention, adversarial models
  - Teresa Lunt: intrusion detection, database security
  - Elaine Shi: privacy-preserving computation
  - Diana Smetters: applied cryptography, usable security, network security
  - Jessica Staddon: inference detection/control, applied cryptography
  - Jim Thornton: system architecture, databases, anomaly detection

- Research areas of interest
  - Distributed pattern detection
    - Anomaly detection without a central authority
  - Adaptive, dynamic whitelisting
    - outsourced/collaborative scanning for malware
    - user-friendly trust models for code
  - Malware prevention for constrained devices
    - focus on limiting power consumption, bandwidth

- **Unique capabilities**

- Automated detection of malicious behavior
- Adversarial modeling
- Usability of security & HCI
- Privacy-preserving data collection & analysis

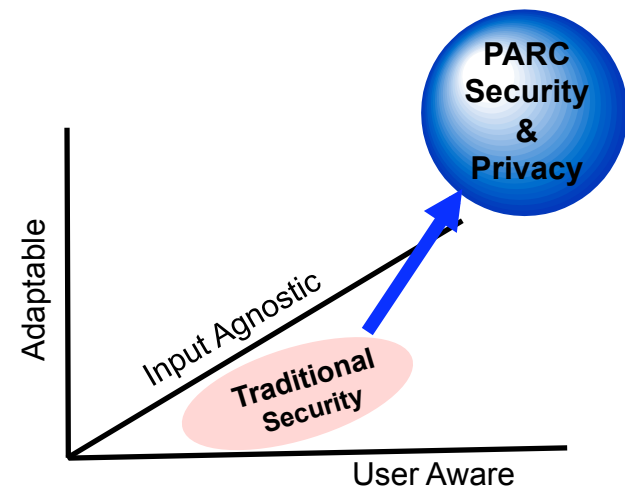
- **Tradition of delivering innovative, high-quality technology prototypes to government and commercial partners**

- Government Examples:

- Vernier (DARPA): collaborative diagnosis of anomalous network activity
- Dynamic Coalitions (DARPA): robust, secure communication with dynamic sets of users
- Total Information Awareness (DARPA): privacy-preserving data mining

- Commercial examples:

- Laptop security (Fujitsu): Technology that binds content access to laptop security posture
- Data Loss Prevention (Fujitsu): Technology for automated generation of DLP policies
- Secure Remote Access (a Fortune 500 company): Secure connection to remote repositories through untrusted devices



- We're looking for partners who complement our expertise in 2 respects
  - Large-scale deployment capability
    - Access to data sources and ability to vet technology with a large user-base
  - Core static/dynamic analysis functionality
    - We will build on platform to extend breadth of analysis (new inputs, temporal aspects) and make approach appropriate for constrained devices

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