Human Factors

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Cyber Problems with a Human Focus

- Security is only as good as the weakest link
- People are one of the weakest links
- Projects focus on human elements of cyber

Human/System Intersection

"Provide innovative human-centric science solutions to enhance the readiness and reduce the cost of our all volunteer force"

- Projects tie in to Reliance 21 Human Systems COI
- People manage, operate, and interact with systems
  - Secure systems and networks
  - Analyze security logs and data
  - Access to sensitive systems and information

Human/Cyber Issues for the DoD

- need to certify cyber operators as mission ready
- Limited cognitive capacity for analyzing large sets of data
- Leaks of sensitive and classified information

Unique Positioning

SEI is well poised to address human/cyber issues

- World renowned cyber expertise
- Close relationships with DoD partners

Collaboration with CMU faculty in complimentary fields

- Cognitive psychology
- Machine learning
- Computer vision

Human Factors Research Projects

Generalized Automated Cyber-Readiness Evaluator (ACE)

- Rotem Guttman

Human-Computer Decision Systems in Cybersecurity

- Brian Lindauer

Insider Threat Mitigation

- Dr. William Claycomb
- Andrew Moore