

HumRRO is an independent, non-profit organization that develops and applies state-of-the-art science and technology to improve the performance of individuals and teams within public and private sector organizations and educational institutions.

HUMRRO QUALIFICATIONS AND CAPABILITIES

HumRRO staff have been working the insider threat problem for nearly 10 years

- Worked with CERT to develop the MERIT model of insider information technology sabotage
- Participated in DARPA's ADAMS program to estimate the risk of insider threat
- Provide support, methodology development, and

RESEARCH AREAS OF INTEREST

Models of psychological and organizational processes leading to malicious insider behavior

- Identify and aggregate dynamic indicators and predict responses to organizational policies
- Explore and formalize psychological dynamics in previous insider threat cases
- Extend the scope of existing models developed for ADAMS and CERT

evaluation regarding insider threat identification to a Government agency

HumRRO expertise combines psychological and modeling knowledge

- Staff trained in industrial-organizational, cognitive, and mathematical psychology
- Inference methodologies, such as Bayesian belief networks
- System modeling, including discrete event and system dynamics models
- Discrete choice models
- Group facilitation for model development

HumRRO develops innovative approaches to incorporate psychological information into models

- Developed model representing the growth of disgruntlement before insider sabotage
- Incorporated leader personality and culture into models predicting their actions



New, process-based, dynamic indicators of insider threats

- Identify indicators of common insider threat processes, such as the "trust trap" and other archetypes
- Integrate indicators of technical and behavioral precursor activities

• Inferred leader personality variables from group actions

CAPABILITIES WE ARE SEEKING

- We are willing to lead or be a member of a team
- We can provides knowledge of psychology, insider threat expertise, and modeling capabilities
- We seek the following capabilities for teaming:
 - Data scientists with knowledge of potential indicators in personnel data
 - Personnel security subject matter experts
 - Creative computer scientists or system modelers

Enterprise insider threat risk assessment models

- Incorporate process-based and static indicators of precursor activities
- Reflect organizational policies and collection strategies
- Extend our existing model developed for ADAMS



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