

ISDA Research Area:
Privacy and Ethics

ISDA Research Description

- Understanding the privacy and ethical issues that derive from potential harmful uses of individual data in the pursuit of security.
- Adaptation of the existing and the design of new frameworks for effective regulation and practice of ethical security implementations.
- Multidisciplinary approaches to the design and development of privacy controls and practices that foster an equilibrium between needed information disclosure (e.g., for system efficiency, security, etc.) and protection of that information.

Example: The Connected Car



Example: Ransomware Attack
Who is liable? Ethical Questions?



Example: NSF Secure and Trustworthy
Cyberspace

• “The NSTC also announced a National Privacy Research Strategy (NPRS) with the goal of enabling individuals, companies, and the government to benefit from cyber systems while effectively balancing those benefits with their risks to privacy. The strategy calls for characterizing key socio-technical issues that challenge privacy, and articulating goals for research in social, behavioral and economic sciences needed for designing, using, and evaluating these socio-technical systems. The NPRS highlights the need for networking and information technology research for underlying privacy-enhancing technologies and related topics.”

(as well as others)

“Topics in the area of social, behavioral and economic sciences include, but are not limited to, research identifying cybersecurity and privacy risks and exploring the feasibility of potential solutions at the individual, group, organizational, market, and societal levels. Proposals that seek to understand, predict and explain attack and/or defense behaviors as well as prevention, and that contribute to developing strategies for remediation are of interest. Related proposals that contribute to the design of incentives, markets or institutions to reduce either the likelihood of cyber attacks or the negative consequences of cyber attacks.”

Example: NSF Smart and Connected Communities

“Social, cultural, legal, and ethical drivers and consequences, including potential unintended consequences, of smart and connected technologies and infrastructures. For example, factors that affect technology adoption, which may include privacy and autonomy considerations”


Questions?

Lightning Talks

Dr. Janine Hiller


jhiller@vt.edu

- Privacy, Security, and Trust
 - NIST Privacy Framework (current research)
 - Health Privacy and Analytics
 - Smart Cities, Data, Privacy
- Data Ethics
 - 5 Year Research Workshop on Law and Ethics of Big Data
- International Cybersecurity
 - Comparison of US and EU approaches (current research) in the Internet of Things environment


A Wicked Problem: Improving Individual Privacy Behaviors

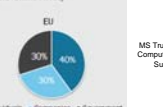
Dr. France Belanger
 belanger@vt.edu

US



73%
46%
21%

EU





30%
40%
30%

MS Trustworthy Computing 2013 Survey

Responsibility for Protecting Consumers' Online Privacy

Privacy Behaviors f Privacy Concerns

But 

Privacy Concerns  Privacy Behaviors

- mPETA
- Belief-Knowledge Gap

E-business
E-government

POCKET
Children

Mobile

Groups: VHC

Ubiquitous

DISCUSSION RELATED TO PRIVACY AND ETHICS

1. What major sponsored research projects would you like to undertake?
2. Are there any major obstacles to your ability to work on these major projects?
3. How can the ISDA help you or your team?

Discussion

- Are there any gaps in needed research expertise?
- What faculty hires would help you or your team move the research project forward?



Discussion

1. What major projects or sponsored research opportunities would you like to work on?
 - What other expertise would help you improve your project(s)?

2. What are some major obstacles to your ability to work on these major projects?
 - How can the ISDA help you or your team?
 - What faculty hiring would help bring your research/group/center to the next level?
 - Are there any gaps in research expertise needed?

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