

VirginiaTech  
Invent the Future

**Security Governance, Standards & Frameworks**

Integrated Security Destination Area

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**Agenda**

- Brief Overview
- Lightning Talks
- Discussion

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**Security Governance, Standards & Frameworks**

- Guide decision making and oversight of practices needed to provide secure environments.
- Security governance, frameworks and standards must be developed, tested, and refined regularly.
  - How to develop a security strategy within an entity's governance framework?
  - How to implement, evaluate and refine that strategy?

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## Security Governance

The diagram illustrates the Information Security Strategic Framework, which is a structured vision articulated into short and long-term objectives. It includes three main components: Information Security Strategic Roadmap, Information Security Strategic Framework, and Information Security Target Operating Model. The framework is supported by a structured set of key activities for all stakeholders. The diagram also shows a cycle of Strategy, Design, Operate, and Implement, with Governance, Risk, Compliance, and Remediation as key elements. The cycle is supported by a structured set of Roles, Responsibilities, and Accountabilities for all stakeholders.

<http://corixpartners.com/information-governance-and-strategy/> <https://nigesecurityguy.wordpress.com/2013/06/>

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## Security Standards

Figure 1: Information Security Management Elements

The diagram shows the Information Security Management Elements, which include Technical standards, Procedures, Management system audits, certification & accreditation, Codes of practice, Process security, Product security, Assurance, and Cultural, ethical, social, and legal issues.

- o Development
- o Implementation
- o Evaluation
- o Compliance
- o Technical
  - o NIST
  - o ISO
  - o PCI DSS
  - o Etc.
- o Security-Privacy (e.g., HIPPA - HHS Security)
- o Non-Technical

[http://www.cisco.com/c/dam/en\\_us/about/ac123/ac147/images/ppj/pj\\_10-4/104\\_standards\\_fig1\\_lg.jpg](http://www.cisco.com/c/dam/en_us/about/ac123/ac147/images/ppj/pj_10-4/104_standards_fig1_lg.jpg)

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## Lightning Talks

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**Eric Jardine, Assistant Professor, Department of Political Science**  
 ejardine@vt.edu

**When I pretend I already have tenure**

1) Normalization      Cybersecurity  $\approx$  A/S

2) Lurking Confounders

3) Error       $Y = B_0 + B_1X_1 + \dots + B_kX_k + e$

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## Virginia Cyber Range

*Cloud-based Resources for Cybersecurity Education*

- Mission to enhance cybersecurity education in Virginia high schools and colleges
- Led by consortium of Virginia 2-year and 4-year CAEs
- Boosting Virginia's cybersecurity industry through strategic educational investments.
- Opportunities (see our website for more information):
  - Use us for your cybersecurity classes!
  - We are providing funding for faculty to provide courseware for the range

Courseware Repository  
 Exercise Area  
 Community of Purpose

David Raymond, Ph.D., Director  
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[VirginiaCyberRange.org](http://VirginiaCyberRange.org)  
 @VaCyberRange

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### International Refugee Research: Data for Smart Policy

Georgeta Pourchot  
 School of Public and International Affairs  
 Georgeta@vt.edu

1. International refugee crisis ----> Local, regional and global insecurity
2. Crisis enhanced by incomplete data ----> Policy decisions on refugees informed by anecdotal information, fear or political rhetoric
3. Topic incorporates analysis of values, capabilities and institutional preparedness to handle human lives affected by war or disaster, in line with the integrated security agenda for national and international security and preparedness.

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### 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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