





Global Security in Physical and Social Environments

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Overview 

- Global Security in Physical and Social Environments –
 - Security at a global level is shaped by geographic realities and the distribution of natural resources.
 - Entities act in a social and physical environment, and their actions are influenced by those boundary conditions.
 - The interrelation of security and these boundary conditions has been a traditional focus of global security studies and remains as relevant as ever, particularly given the rapidly changing physical environment due to global warming and the re-emergence of Cold War-like perceptions of security, such as the recent decisions of several nations to modernize their nuclear arsenals.
 - In the arena of global security, technological advances such as remote sensing, climate modeling, and big data play an important role in providing scholars and decision makers with better information.
 - Recognizing this, we aim in this research thrust to understand how physical, technological, and social environments threaten, as well as enhance, human security, social justice, and civil liberties.



5/18/2017 Virginia Tech Integrated Security Destination Area 2



Lightning Talks



5/18/2017 Virginia Tech Integrated Security Destination Area 3

Sonja Schmid (STS), sschmid@vt.edu

A Virtual Social Laboratory for Investigating Extremism, Hate, and Cyberbullying
Bert Huang (Computer Science, bhuang@vt.edu), James E. Hawdon (Sociology, Center for Peace Studies and Violence Prevention, hawdon@vt.edu), and Anthony A. Pellegrino (Sociology, apellegr@vt.edu)
 Integrated Security Destination Area (ISDA) Security for the Internet of Everything
 Global Security in Physical and Social Environments, May 25, 2017

The VT Virtual Social Laboratory (VTVSL) will be a Twitter-like role-playing game where participants are observed interacting in social networks. Creating the VTVSL will enable researchers to perform experiments about the reactions to online extremism and cyberviolence in a manner that is practically impossible otherwise.

The design of the VTVSL allows experimentation that maintains aspects of real online behavior, such as complex dynamics within large social networks, with users behaving based on personal context. Yet, role-playing protects participants by not interfering with real peoples' lives for the sake of science. Thus, VTVSL will allow studies that are not possible on the real internet, for both ethical and technical reasons.

By demonstrating its efficacy, the proposed research will be transformative, enabling a new social scientific methodology that could be used to improve understanding of a wide variety of social phenomena. The research has the following six objectives:

1. To further develop and test cyberviolence detection algorithms;
2. To test the disparity between how a cyberviolent message is perceived and how it was intended;
3. To test the efficacy of criminological theories for cyberviolence participation and victimization;
4. To test how the behaviors of bystanders and guardians affect cyberviolence;
5. To test if role-playing affects participants' understanding of cyberviolence; and
6. To test if role-playing is an accurate means of modeling behavior.

CHANDLER
Camillo Mariani (mariani@vt.edu)

$\bar{\nu}_e + p \rightarrow e^+ + n$
 $n + {}^6\text{Li} \rightarrow {}^3\text{H} + \alpha + 4.78\text{MeV}$

A (VT) patent-pending advance in technology that will make possible precision measurements of reactor neutrons close to an active core and without massive shielding.

Small prototype (3x3x3) to develop and test electronics and readout - we were able to test physical detector capabilities

Brett Shadle
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History of refugees: governments, NGOs, civil society, and refugee agency

- What are the historical origins of refugee and humanitarian crises?
- How have various forces (cultural, legal, religious, strategic, etc.) shaped decisions made by governments, militaries, NGOs, and private citizens during refugee crises?
- How have refugees negotiated their new circumstances to better their lives?




ASGEDECH SENBETA BOKU
(ETHIOPIAN REFUGEE IN KENYA, 1937-1941)

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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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