Challenges of Cyber Security Education at the Graduate Level

Ravi Sandhu
Executive Director and Endowed Professor
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ravi.sandhu@utsa.edu
www.profsandhu.com
www.ics.utsa.edu
Graduate Cyber Security Education

World-Leading Research with Real-World Impact!
We can, and must, do better
Graduate education has been neglected
  * Often a step-child in discussions about workforce development
  * Academia incentives encourage inertia
Graduate education is critical
  * These are our future practitioners and teachers
  * Cyber security is a growing field
  * Unifies and defines the profession
Too much material to teach
Growing faster than teachers can keep up with it
- Computer science theory
- Computer system principles and practice
- Cyber security theory
- Cyber security system principles and practice
- Statistics, sociology, organizational theory, economics, psychology, game theory ....
- Laws, regulations, compliance ....
- Privacy ....
- History, successes and failures
- ....
Mismatch of academic incentives

Complacency: graduates are in high demand

No community effort, no forum

People who can make a difference are typically preoccupied by other matters
This is a challenge for Graduate education in many high-tech high-touch areas.

- What is special about cyber security?
- Inertia will not fix the problem
- Merits a community effort