University of Colorado
Colorado Springs

CS4950/5950
Homeland Security & Cybersecurity

Cyber Profession

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Lesson 43
Cyber Profession

Rick White, Ph.D.
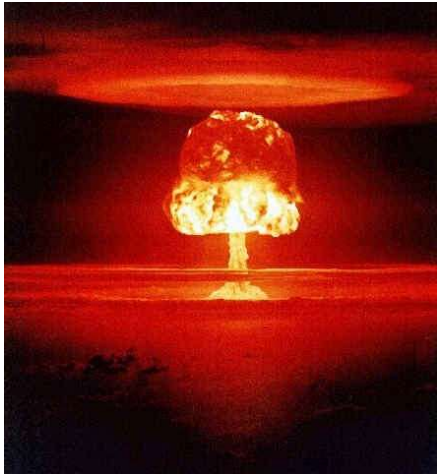University of Colorado, Colorado
Springs

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The Cyber Weapon
- Inexpensive to Develop
- Cheap to Maintain
- Easy to Deploy
- Autonomous Seeking
- Extremely Stealthy
- Adjustable Yield
- Global Reach
- Self Replicating

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...Same with the Cyber Profession.

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- **Axiom 1: The more experience you have, the less you know.**
  - Corollary 1.1: Most recent graduates are most technically proficient.
  - Corollary 1.2: Nobody knows everything, and what we know is obsolete.
- **Axiom 2: Putting more people on the problem slows the solution.**
  - Corollary 2.1: Quality, not quantity counts; bigger isn't always better.
  - Corollary 2.2: Known problems are already solved… they're called "patches".
- **Axiom 3: Standardization increases vulnerability.**
  - Corollary 3.1: Same h/w + same s/w = same vulnerabilities.
  - Corollary 3.2: Checklists are only good for known problems.
- **Axiom 4: Pulling the plug can make things worse.**
  - Corollary 4.1: Trouble comes at the most inopportune time.
  - Corollary 4.2: Live by Murphy's Law.
- **Axiom 5: Tomorrow's computer will be better, faster, cheaper.**
  - Corollary 5.1: Any computer over 10-years old is a relic...
  - Corollary 5.2: ...except in DoD and FAA where they are "operational"

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Truly, we live in extraordinary times where our safety and security depend on trusted cyber systems.

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Today's cybersecurity professionals shoulder an unprecedented burden against an unprecedented threat.

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Today's cybersecurity professionals serve as the first and last line of defense, and may be all that stand in the way between order and chaos.

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Conclusion

Questions?

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