Creating Cybersecurity Professionals of the Future

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Introduction
- By 2022, shortage of 1.8 million cyber professionals (CSX and ISACA, 2019)
- Lack of coordinated collaboration
- Academia takes approximately 3 years to modify curriculum
- Evolving threatscape in Industrial Control Systems (ICS)
- Focus on cyber risk to lifeline infrastructures

Methods

People
- Coordinating efforts of academia, industry & INL
- Mentors & apprentices

Process
- Assessing industry needs
- Developing curriculum
- Developing apprenticeship

Technology
- Building virtual ecosystem
- Virtualizing an ICS testbed

Anticipated Results
- Create an ICS cyber workforce pipeline solution
- Transform ICS operational resilience
- Deliver an ecosystem framework for advanced collaboration with access to the latest research & threat information

V
- Virtual

E
- Ecosystem for

C
- Collaboration &

T
- Transforming

O
- Operational

R
- Resilience

ICS cybersecurity professionals