Information Security Research and Education Network INSURE



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Background

- NICE 2012 Report (http://csrc.nist.gov/nice/documents/nicestratplan/nicestrategic-plan_sep2012)
 - Promote interest in Computer Science and Cybersecurity by increasing the Diversity and Quantity of Course offerings and Research Opportunities
- To achieve this objective the following 5 strategies are suggested in the NICE report.
 - Increase the quantity and diversity of computer science courses in high schools.
 - Increase the quantity and diversity of undergraduate and graduate cybersecurity curricula.
 - Champion cybersecurity competitions.
 - Advance excellence in cybersecurity research and development.
 - Coordinate a learning network of virtual national cybersecurity laboratories.

Current State

- 54 Centers of Academic Excellence-Research (CAE-R) institutions in the United States.
- Nodes of excellence, some interaction, but not a network.

Proposed Work

- Develop and pilot an initial, geographically distributed coalition to test a research network.
 - Purdue University, UMBC, UC-Davis, Mississippi State University, NSA
- The potential benefits for our "research network" approach include:
 - connecting institution-level resources, University enterprise systems, and national research networks.
 - enabling more rapid discovery and recommendation of researchers, expertise, and resources;
 - supporting the development of new collaborative science teams to address new or existing research challenges;
 - exposing and engaging graduate students in research activity at participating institutions;
 - providing for the development and sharing of tools that support research, and,
 - facilitating evaluation of research, scholarly activity, and resources, especially over time.

Outcomes

- Enhance <u>students' research ability by working on applied research problems</u> in a collaborative, team-oriented research environment with mentorship and support from multiple universities.
- Build and enhance additional capacity of educational institutions to offer research opportunities where students can <u>bridge research theory to research practice</u> through real world problem sets with real world application.
- Extend the <u>research output from CAE-Rs</u> in the field of cybersecurity and contribute to the advancement of finding solutions to unclassified and classified research problems in the area of National Information Security.
- Investigate the creation of a Cybersecurity Research Hub to connect these individual CAE-R institutions and agencies into a network using the HUBzero® Platform.

Questions? Advice?

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