

NIAC Day@PNNL

Breakout Session Outcomes

Session: Cyber security

Facilitators: David Manz (PNNL) and Radha Poovendran (UW)

Areas of Mutual Interest

Interest Areas	Who Should be Engaged?
<ul style="list-style-type: none"> Bio-inspired security research Science of adversary modeling & mitigation 	Bio, modeling, epidemiology, Modeling, adversaries
<ul style="list-style-type: none"> Expanding access quarantine Privacy 	Network research, operations
<ul style="list-style-type: none"> Control, performance, and security of CPS (e.g. based on power system physics; power system model & network coms model) Policy (security, nonproliferation, mechanisms) 	Control system, power system, network system, research International, legal, security
<ul style="list-style-type: none"> Testbed federation (HIL, communication, data, models), scalable, distributed algorithms for system control, performance, and security. 	Testbed operations, control system, power system, Control system, power system, network system, research
<ul style="list-style-type: none"> Real world datasets understanding and collection Training & Education 	NIH-style large scale distributed Entire community

Potential Opportunities for Collaboration

Initiative Area	Research Opportunity
ARC Metrics project ARC Contingency Analysis	PNNL ARC PNNL ARC
ARC Theory of Resilience CCSI FPGI	PNNL ARC
Cyber immune response, testbeds, medicine, resilience	NSF CPS, SatC BAA
	DHS cyber security BAA
	AFRL cyber security BAA

Next Steps

What	Who	How
Identify, students and staff who are interested in collaboration	Interns, postdocs, professors, researchers	2 day Workshop @ UW on cyber security
Resilient Control system collaboration	CCSI, ARC, Radha	Jakob visit UW, and above
Small group explore upcoming BAAs	Radha, David M., others	Telecon, visit DC together
Encourage, small engagements, research sharing	All	Face to face meetings, telcon, email, wiki
ARC seminar	ARC PI and leadership	UW visit