WELCOME TO THE I3P MONTHLY!
The Institute for Information Infrastructure Protection (I3P) is a consortium of 26 leading universities, national laboratories, and nonprofit institutions dedicated to strengthening the cyber infrastructure of the United States.

The I3P Monthly highlights the impact of I3P experts on research, policy, and practice. For more information on the I3P, see our website - thei3p.org.

CONSORTIUM NEWS

Congratulations Matt Bishop (University of California, Davis) on new book - Computer Security: Art and Science!

Computer Security: Art and Science begins with a discussion of what computer security is and how threats are connected to security services. The combination of desired services makes up a policy, and mechanisms enforce the policy.

Congratulations David Manz (Pacific Northwest National Laboratory) on his new book with Thomas Edgar - Research Methods for Cyber Security!
Research Methods for Cyber Security teaches scientific methods for generating impactful knowledge, validating theories, and adding critical rigor to the cyber security field.

Congratulations to the University of California, Davis Cybersecurity Club!

Please join us in congratulating the UC Davis Cybersecurity Club and the team they fielded for the Department of Energy's Cyberforce Competition (December 2018). The team won the Berkeley Lab's regional competition, and did well in the national one (5th out of 70 teams). This was a contest to protect a simulated oil transportation network, power delivery system, and a high-performance computing system against attackers from the the national labs, private sector, and the National Guard, so it was a defensive competition. Congratulations to the team members, Shannon Chee, Matt Bishop, Grayson Cox, Kevin Rong, and Jake Stebbins!
I3P January Webinar: Detecting User Experience Issues of the Tor Browser in the Wild

presented by Kevin Gallagher (New York University) who discussed a recent study performed for ACM CCS 2018 in which they measured the UX issues of the Tor Browser. He discussed the method for discovering UX issues in the Tor Browser, the issues that were discovered by the experiment, and some potential solutions for the discovered problems. To access the recording, hit playback then PLAY to listen to the presentation.

I3P White Paper – Regulatory Impacts on Cybersecurity Governance

This section provides research on impacts by the European General Data Protection Regulation (GDPR) and other cybersecurity regulations. Our researchers examine the practical implications of privacy, data breach and general cybersecurity on governance issues. Their papers will also examine how regulatory changes may impact the creation of norms on the conduct of state and non-state activities in cyberspace.

Deborah Housen-Couriel, "Data protection as an emerging norm for cyberspace activities: two national approaches to balancing national security considerations with data privacy."

Deborah Housen-Couriel is an Israeli attorney specializing in cybersecurity and data protection issues for clients with global reach, and her practice is supported by independent cybersecurity research and teaching. She was a member of the group of experts for the Tallinn Manual 2.0 and is currently a core expert for the MILAMOS project on space and cyber law. Deborah chairs a Global Forum on Cyber Expertise Working Group and serves as a member of the advisory board of the Hebrew University Cyber Security Research Center.
**I3P MEMBER HIGHLIGHTS**

**Dr. Massimiliano (Max) Albanese** (George Mason University) along with the Palo Alto Research Center, Inc. (PARC) was awarded a contract from the Defense Advanced Research Project Agency (DARPA) Configuration Security program (ConSec) to collaborate on a project christened SCIBORG: Secure Configurations for the Internet of Things (IoT) based on Optimization and Reasoning on Graphs. Max received a $609k subcontract from PARC for this project, for a period of 3.5 years. Read the [article](#) for more details on the project.

**David Balenson** (SRI International) was the Conference Chair for the [2018 Annual Computer Security Applications Conference (ACSC)](#) which was held in San Juan, Puerto Rico on December 3-7, 2018. The conference brought together cutting-edge researchers, with a broad cross-section of security professionals drawn from academia, industry, and government, to present and discuss practical solutions for computer and network security technology.

**Additional Highlights include:**

- At the conference, David's colleague, Michael Locasto (SRI International), presented a [Case Study](#) on work that he and David performed on *Creating Failure Scenarios for Natural Gas Critical Infrastructure*, The Case Study shared the failure scenarios and their categories, the threat model they encompass, the assumptions and caveats underpinning their creation, the process for designing and generating them, and lessons learned.

**Andrew Bochman** (Idaho National Laboratory) was a featured speaker at the Protect our Power "[Best Practices - Utility Cybersecurity](#)" conference in New Orleans, LA, February 2019.

**Dr. Diana Burley** (The George Washington University) is a featured curriculum author as part of the National Security Agency's National Cybersecurity Curriculum Program. In the 2017 fiscal year, NSA awarded 54 grants to universities to build courses and modules in high need cybersecurity areas. All curriculum has undergone a strenuous multi-faceted review before being released on [www.clark.center](http://www.clark.center). Curriculum developed by Dr. Burley is one of the first to be released nationally in this unique and transformative effort as the NSA works to secure our nation by strengthening the cyber workforce.

**Additional Highlights include:**

- Along with two other GW faculty members (Dr. Shelly Heller-SEAS and Dr. Saniya LeBlanc-SEAS), she has been selected as a finalist for the 20th Annual [Women in Technology Leadership Awards](#). The Annual Leadership Awards program identifies, recognizes, and celebrates women working in the greater Washington, DC region who have exemplified unique vision, leadership and profound success in the technology industry. Women in Technology will announce the winners at the Leadership Awards Banquet on May 9, 2019.
- She was interviewed for a news segment on CTV News Toronto Canada on the recent [story about Facebook](#) shutting down hundreds of Russia-linked pages.
- Interviewed about cybersecurity on WCAI radio ("Local NPR for the Cape, Coast, and Islands"). A link to the interview is included in the article, "[It Was Another Tough Year For Cybersecurity](#)."
- Quoted in Miami Herald article, "[Vulnerable to attack: Businesses should boost cyber defenses](#)."
• Quoted in San Francisco Chronicle article, "6 things small businesses can do to improve cybersecurity."

**Dr. Michael Mylrea**, Senior Advisor for Cybersecurity & Blockchain Lead (PI) at PNNL and Fellow at I3P, presented at the RSA conference on Breaking the Blockchain: Real-World Use Cases, Opportunities and Challenges. This hour-long plenary and training highlighted lessons learned in applying blockchain and distributed ledger technology to secure operational technology in critical energy infrastructure. Link: https://www.rsaconference.com/speakers/michael-mylrea

**Additional Highlights include:**


• Leading the largest federally funded blockchain project for cybersecurity for critical infrastructure, in partnership with industry and government. In March, Dr. Mylrea's team, which included Department's of Defense and Energy, various energy utilities and large advisory board from industry and government, completed testing two blockchain pilots to improve the trustworthiness and integrity of industrial controls systems in electricity infrastructure. One pilot provided improved chain of custody for ICS supply chain. The other improved data attestation and provenance for ICS asset management.

• Published article entitled Blockchain: Next Generation Distributed Autonomous Organizations featured in European Cybersecurity Journal.

• Nominated cybersecurity technical lead of IEEE P2418.5 Standards Development Working Group for Blockchain in Energy.

• Started development of a next generation cybersecurity assessment tool for DHS ICS CERT.

• Presented on Energy Security 3.0 - Defending the Cyber Energy Nexus at the Center for Strategic and International Studies' Executive Energy program in Washington, DC.

**Zachary Tudor** (Idaho National Laboratory) was elected as an officer to the (ISC)² Board of Directors. The (ISC)² - the world's largest nonprofit association of certified cybersecurity professionals announced in January 2019, the newly-elected officers for its Board of Directors. Zach will serve a one-year term in his position as Secretary. The board is comprised of cybersecurity professionals from around the world representing academia, private organizations and government agencies.

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**UPCOMING EVENTS**

**I3P Experts on the Road:**
I3P Experts regularly share their expertise at meetings around the world. See below for a sample of upcoming events. Contact individual meeting organizers for additional details.

• **Dr. Diana Burley** (The George Washington University)
  ✦ Presenting at [ITEA 5th Cybersecurity Workshop, Challenges Facing Test and Evaluation; March 25-28, 2019.](http://www.iteanet.org/)
  ✦ Presenting at [Making Connections 2019: Educational Technology Leadership Summit; April 8, 2019.](http://www.makingconnections.org/)

• **Dr. Michael Haney** (University of Idaho)
  ✦ Presenting at [Tulsa Cyber Summit 2019, March 24-26, 2019.](http://www.tulsacybercon.com/)
  ✦ Keynote at the [5th annual BSidesOK conference, April 12, 2019.](http://www.bsideok.com/)

**Spring 2019 Webinar Series:**
April 19, 2019: Dr. Terry Merz (PNNL) - Phishing for Solutions: Are Cybersecurity Compliance Based Programs Working? | Register!

Contact us to learn more or to request webinar topics.

These complimentary 30 minute webinars, held at noon ET on the 3rd Friday of each month, provide a relaxed forum through which I3P experts share state-of-the-art research on topics of importance to securing cyber infrastructure.

*Do you want to provide your staff or clients with exclusive learning opportunities lead by global cybersecurity experts? Contact us to discuss partnership opportunities!

More information on the I3P is available here. Contact us at thei3p@gwu.edu to discuss opportunities to engage with I3P subject matter experts.