

Newsletter #36: January- February 2021

Developing a Cyber Range for Simulating Attack Scenarios



The CAMS February members workshop introduced a CAMS and BvTech collaboration. The Cyber Range is an isolated simulation that allows for security training to occur without impacting business or operations. When the simulation is in progress, the user can see how certain

attacks might occur from the operator's and the attacker's point of view, and how to prevent significant damage. The simulation works by having parameters and settings that are modified to specific use cases. Future versions will become more customizable and have the ability to model a specific type of IT and OT network and have system interconnection. The summary from this event, and all previous CAMS events, is available to members on the Members portal on the CAMS website. https://cams.mit.edu/members-only/

Building a Culture of Cybersecurity During the Pandemic Presentation



Keri Pearlson, CAMS Executive Director, spoke at the Future of Leadership Summit on the topic of building a culture of cybersecurity. In her session she talked about how cybersecurity is everyone in an organization's responsibility, especially in a pandemic where leaders are feeling the pressure to make changes for better security within their organization.

Nazli Choucri Connects the Dots Between Technology and Geopolitics

In 2020, Nazli Chourcri, CAMS Research Affiliate and Professor of Political Science and a senior faculty member at the Center of International Studies (CIS), was elected as an AAAS Fellow for her work on international relations, cybersecurity, and global sustainability solutions. Her work involves urgent and timely topics such as changes in international relations, conflict and violence, and the international political economy, with a focus on cyberspace and the global environment. Her current research explores cyberpolitics in international relations. Any one of these could be fertile ground for research, but for



Choucri, the work also involves looking for the relationships between or among these issues.

CAMS Director Interviewed by Tommy Tucker



Stuart Madnick joined WWL First News to discuss "Is our Power Grid at Risk of a Cyber Attack?" The Texas power grid issues during the recent ice storm would be a good case study in why it is important for leaders to reevaluate their power grids. If mother nature caused this much damage, Stuart stressed that an intentional cyber-attack could be much more disastrous. Cyber-attacks could render an entire power grid useless within seconds if they are not adequately protected from cyber threats.

Wall Street Journal Publishes CAMS Article about Side Door Hacking

On February 23, Stuart Madnick published a paper in the Wall Street Journal titled "More 'Side Door' Hacks are Coming. Here is how businesses can prepare." He discussed ways to prevent such an attack, including organizations carefully evaluating the quality of a vendor's cybersecurity before giving a "pass" to its network. Possibly the most obvious, though frequently neglected, mitigation strategy is exfiltration detection and restriction. Companies would benefit from monitoring the data traffic leaving their networks. Read the paper here: https://bit.ly/3t33cg9

Save the Dates: March 4, 2021 April 1, 2021 May 6, 2020

CAMS Member Workshops Update

In response to MIT's proactive efforts to control the spread of COVID-19 and keep our community healthy, CAMS Workshops have been converted into a series of webinars on various research topics. Contact our Directors for more information.

Join CAMS Consortium in 2021

Did you know that CAMS research is funded by companies like yours? CAMS is a consortium that involves leading edge companies in cybersecurity. In return for supporting the research, members are invited to member's only workshops. These events are often small and designed to be intimate question and answer sessions for CAMS members to participate in. If you would like to know more and become a CAMS member visit cams.mit.edu/join-us.

Did you know...

Our CAMS team, in partnership with MIT Sloan Exec Ed, offers two cybersecurity management programs for your business partners and nontechnical executives

For more information, visit

https://cams.mit.edu/events

About Cybersecurity at MIT Sloan: Formerly the Interdisciplinary Consortium for Improving Critical Infrastructure Cybersecurity, (IC)³

MIT is the natural place to study cybersecurity, given its rich history of technology innovation, and the MIT Sloan School is the perfect environment for the Cybersecurity at MIT Sloan (CAMS) research consortium. The Consortium is focused on the managerial, organizational, and strategic aspects of cybersecurity. More information can be found at https://cams.mit.edu or by contacting us:

Stuart Madnick, Director smadnick@mit.edu

Michael Siegel, Director msiegel@mit.edu

Keri Pearlson, Executive Director kerip@mit.edu

MIT Alumni Event Features Cybersecurity Trends and Strategies Panel

On March 18, Ilya Kabanov, Research Affiliate with CAMS, will join an MIT Alumni panel titled: Cybersecurity Trends and Strategies in the Post-Covid World. Cybersecurity is a growing concern for businesses worldwide, particularly during the COVID-19 pandemic, and the number of global cybersecurity incidents has been increasing year over year. Join this virtual panel discussion to hear from expert alumni leaders who will discuss the top trends shaping the industry and share their insights for digital organizations to protect against data breaches and cyberattacks. The session will be followed by a digital networking reception. Register here: https://bit.ly/3buYim9

Upcoming CAMS Events – Please hold these dates

Member's Only Webinars: April 1 | May 6 | June date TBD

MIT Sloan CIO Symposium: CAMS Led Panel on April 20 | agenda: https://mitcio.com/agenda/
Friday Research Team Meetings: CAMS very informal research team meetings are now virtual and open to anyone in the CAMS community who would like to attend. Held most Fridays from 11:30-1pm Eastern. Send a note to the CAMS directors to join the email list.

Cybersecurity Executive Education Programs Developed by CAMS
Cybersecurity Leadership for the Non-Technical Executives (Live online): Apr 21-23, 2021
Online Program: | Mar 3-Apr 20, 2021 | Apr 22-Jun 9, 2021 | Jun 24-Aug 11, 2021

CAMS In the News

February 25, 2021: Stuart Madnick was interviewed for GBH 89.7: <u>"Food or Textbooks: New Bill Aims to Stop Food Insecurity on College Campuses"</u> Link: https://bit.ly/3bYj0Kt

February 23, 2021: Stuart Madnick wrote an article for the Wall Street Journal: "More 'Side-Door' Hacks are Coming. Here is how Businesses can Prepare." Link: https://bit.ly/2Pj0F2Q

February 19, 2021: Stuart Madnick, Keri Pearlson, Keman Huang, and Michael Siegel were featured in a TechRepublic article: "4 Ways to Defend Against the Dark Web's Crime Ecosystem, According to MIT Researchers." Link: https://tek.io/3kGXDRB

February 19, 2021: Stuart Madnick was quoted in a Boston Globe article: "Why Didn't the Massachusetts Vaccine Website Work Better?" Link: https://bit.ly/3uL9d2M

February 19, 2021: Stuart Madnick was interviewed in a podcast by WWL: "Is our Power Grid at Risk of a Cyber Attack?" Link: https://bit.ly/37YWqQn

A Few of the Most Recent CAMS Research Papers

(Available to CAMS Members at https://cams.mit.edu/members-only/)

- "Building a Security Propaganda Machine: The Cybersecurity Culture of Verizon Media" by Keri Pearlson (CAMS), Sean Sposito, Masha Arbisman, and Josh Schwartz (Verizon Media), February 15, 2021.
- "Preparing for Cyber Breaches with Fire Drills and Table Top Exercises" by Keri Pearlson, Brett Thorson, Stuart Madnick and Michael Coden. Published at Harvard Business Review, March 9, 2021
- Sneak peek: "From Bolted-On to Baked-In: Designing Cybersecurity into Digital Offerings" (Full Paper) by Dr. Keman Huang and Dr. Keri Pearlson, In-progress, January 28, 2021.
- **Sneak peek:** "A Major Breakdown of International Trade and Next Global Financial Crisis: Could be Caused by Efforts to Prevent Cyberattack on the Web" by Stuart Madnick and Keman Huang, In-progress, 2021.
- **Sneak peek:** "Development of a Research Plan to Understand the Role of Compliance in Improving or Hindering Cybersecurity in Organizations" by Stuart Madnick and Angelica Marotta, In-progress, 2021.
- "Varieties of Public-Private co-governance on cybersecurity within the digital trade: Implications from Huawei's 5G" by Keman Huang, Matthew Deegan, Stuart Madnick, Fang Zhang, and Michael Siegel. 2021.