



Newsletter #31:
March-April 2020

Newsletter

We are currently in an unprecedented global pandemic that has introduced a plethora of ways for attackers to prey on vulnerabilities. COVID-19 brought with it channels for phishing attacks, endpoint hackers, and countless cybersecurity risks brought on by remote work. Cybersecurity at MIT Sloan is here to share vital information and continue research aimed at making our partners and members more secure in a rapidly adapting world.

CAMS First Online-Only Workshop on Cloud Security

This March, CAMS hosted the first of a series of webinars on cloud security designed to replicate the experience of CAMS' traditional in-person Spring conference. The panel, titled "What can we Expect from Cloud Providers?" consisted of cloud experts from CAMS members Microsoft, Google, and Cisco Systems. Our panelists divulged concerns from the participants such as general questions for safe practices when computing in the cloud, cloud provider responsibility when it comes to breaches, and suggestions for CISO's. Remember that cloud is an incredible technology, but people and processes make it work. The panelists and members determined that every company needs to make and drive their own agenda for how to best utilize the cloud because each company's needs are determined by the industry, size, and other variables.

CAMS Member Workshops Update

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

Moderator:



Keri Pearlson
MIT Sloan



Joram Borenstein
Microsoft



Il-Sung Lee
Google



Mark Stanislav
Cisco

CAMS at 19th Annual Security Conference in Las Vegas (Virtually)

Cybersecurity at MIT Sloan was well represented at the 19th Annual Security Conference in Las Vegas, which, for the first time, was held remotely. CAMS staff presented four papers.

- Prof. Stuart Madnick joined Angelica Marotta in presenting *Analyzing the Interplay between Regulatory Compliance and cybersecurity*
- Shaharyar Khan presented *Cybersafety Analysis of Industrial Control Systems: Industrial Chillers*
- Nelson Novaes presented *A Case Study of the Capital One Breach*, and
- Keman Huang presented *Cyber Securing Cross-Border Financial Services: Calling for a Financial Cybersecurity Action Task Force*.

This conference provided a forum for discourses in security, assurance, and privacy that enhance the understanding of current events, but also nurture future dialogues related to security. This conference has a focus on organizational and technical aspects of information protection that is highly relevant to CAMS research. Members of the consortium can view these papers on the Member's Only page of our website: <https://cams.mit.edu/members-only/>

CAMS Research Update

CAMS researchers are spinning up a new sponsored research project on Simulating Attack Scenarios in Industrial Networks. This project will study well known threat models and attack scenarios of industrial networks, and create a model to generate, test, and attach scenarios. The goal is to create a dynamic risk-based model to support cyber management. If you would like to know more, contact Michael Siegel.

Did you know...

Our CAMS team, in partnership with MIT Sloan Exec Ed, has launched 2 cybersecurity management programs for your business partners and non-technical executives

Take these courses online or in person. For more information, Visit <https://cams.mit.edu/events>

CAMS Affiliate Leads Boston Conference on Cyber Security

For four years, Boston College and the FBI have hosted the Boston Conference on Cybersecurity, a one-day event featuring lectures and panel discussions from international leaders of emerging technologies, operations and enforcement, and real-life cyber and national security concerns. On March 4th, CAMS Research Affiliate and founding director of the M.S. in Cybersecurity Policy and Governance program at BC, Kevin Powers, once again designed and led an engaging agenda on data compliance, risk, and information sharing. For more information, here is a link to the event's homepage <https://bit.ly/3csaQc6>.



Upcoming CAMS Events – Please put on your Calendar

Summer Member's Only Webinar: May 21, 2020

Fall Member's Only Webinar: To Be Determined

Fall Member's Only Workshop: November 5, 2020

Winter Member's Only Webinar: To Be Determined

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. Want to join? Just let us know.

Cybersecurity for Non-Technical Managers Executive Education Program

Next Online: Jun 24-Aug 11, 2020

In the Press

April 10, 2020: Stuart Madnick was featured in an *Automation World* Article: [“Cybersecurity Lessons from Safety”](#)

March 6th, 2020: Stuart Madnic wrote an article for *The Wall Street Journal*: [“Companies Should Stop Telling Employees to Keep Changing Their Passwords”](#)

February 15, 2020: Stuart Madnick was interviewed for a MIT Executive Education blog post: [“What Can We Learn From the Reported China Cyber Attack on Equifax?”](#)

February 14, 2020: Stuart Madnick quoted in an *MIT Supply Chain* Article: [“Five Supply Chain Articles that Deliver Competitive Advantage”](#)

January 23, 2020: Stuart Madnick wrote an article for *Harvard Business Review*: [“How to Safeguard Against Cyber Attacks on Utilities”](#)

Recent Posters and Papers

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

[“CEO's Cybersecurity Role During COVID19”](#) by Keri Pearlson and George Wrenn, March 20, 2020 (CAMS White Paper)

[“Companies Should Stop Telling Employees to Keep Changing Passwords”](#) by Stuart Madnick for *The Wall Street Journal*, March 2020.

[“Cybersafety Analysis of Industrial Control Systems: Industrial Chillers”](#) by Shaharyar Khan and Stuart Madnick, January 2020.

[“How to Safeguard Against Cyberattacks on Utilities”](#) by Stuart Madnick, published in the *Harvard Business Review* January 2020.

[“Cybersafety: A System- theoretic Approach to Identify Cyber-vulnerabilities & Mitigation Requirements in Industrial Control Systems”](#) by Shaharyar Khan, Stuart Madnick in *IEEE Transactions on Power and Energy Technology Systems*, January 2020.

[“Cyber-Physical System Security Automation through Blockchain Remediation and Execution \(SABRE\)”](#) by Matthew Maloney, Gregory Falco, and Michael Siegel, January 2020.

[PreventOT/PhysDamage: Anticipating and Preventing Catastrophic OT Physical Damage Through System Thinking Analysis](#) by Shaharyar Khan and Stuart Madnick, presented at CREDC 2020.

[Evaluating Effectiveness of an Embedded System Endpoint Security Technology on EDS: Defeating the Hackers of IIoT Devices](#): by Matt Maloney, Michael Siegel, Greg Falco, and Elizabeth Reilly. Presented at CREDC 2020.

[Scenario-Based Simulator for Operational Resilience During a Cyber Attack](#) by Keman Huang and Michael Siegel presented at CREDC 2020.

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
