

Insights and on-demand education from trusted experts

# **Cybersecurity education** for a connected world

On demand programming begins October 26, 2020

#### Trust is essential.

Imagine the possibilities when intelligent power is fully integrated into homes, buildings, machines and vehicles. Now, imagine the consequences if we reach this level of connectivity without making cybersecurity the number one priority.

A world dependent on connectivity and electrification needs trusted environments. To advance cybersecurity, we're bringing together experts from around the world to weigh in on what strategies are working, what can be done better and what will be required to support a more secure tomorrow.

Cybersecurity Perspectives is a global forum and educational program designed to help advance internet security by combining best practices and direct experiences with leading-edge research and development. Gain insights from our experts, partners and customers on how you can better manage risk to support a more cybersecure future.

## On demand programming begins October 26, 2020

## FEATURED KEYNOTE SPEAKERS

## Be sure to join our live keynote address at 9:00 a.m. ET



#### Michael Regelski

Senior Vice President, R&D - Intelligent Power Management Solutions and Chief Technology Officer **Electrical Sector** 



As digital connections increase, how does industry move forward with trust and confidence? Michael Regelski kicks off our global forum with a perspective focused on actions industries can take today to improve their cybersecurity performance. Discover how to achieve common and consistent cybersecurity standards, the importance of third-party conformance assessments and certifications, and how collaborating with customers and other organizations can raise security standards globally.



#### **Aravind Yarlagadda** Executive Vice President and

Chief Digital Officer



Industrial companies are in the midst of a digital transformation and are putting in place solutions to transform data into knowledge, insights and actions for increased operational value for the enterprise and its customers. Join Aravind Yarlagadda as he shares ization's role in today's energy transition, cybersecurity how Eaton lays the foundation for innovation through data insights, digital solutions and collaborative services that ensure safer, smarter and more efficient power.

#### EXPERT-LED PANEL DISCUSSIONS

Explore security trends and the strategies you can implement right now to manage cybersecurity risk and support a more cybersecure future.

# Protecting IIoT and **Endpoint Security**

Building trusted, resilient IIoT endpoints requires a range of technologies working in harmony. Eaton's Dick Kerr and Luiz Huet de Bacellar spearhead on the advanced technologies slated to safeguard workflows on connected networks.



**Joe DiPietro** Director, Technical Sales





**Michael Fabian** Principal Consultant





Aseem Jakhar Co-Founder/Director, Research







Director, Advanced Technologies





Vice President and Chief Information Security Officer



# **Global Cybersecurity Standards**

#### Many countries develop requirements without regard to global conformity.

Eaton's Kevin Lippert and cybersecurity director, Max Wandera, head an informative discussion with UL, IEC and ISAGCA thought leaders on the importance of validating connected products with global standards through international partnership.



**Isabelle Noblanc** Vice President and General Manager, Identity Management and Security





**Andre Ristaino** Managing Director, Global Alliances and Consortia





Wolfran Zeitz **Executive Secretary** 





**Kevin Lippert** Manager Codes and Standards, Eaton; President, USNC of IEC





Max Wandera Director, Product Cybersecurity Center of Excellence



Cybersecurity in business, applications and markets Examine how to integrate cybersecurity into existing production and maintenance routines.



Review our sessions and meet our educators:



Attend online classes, complete with professional development hours from Registered Continuing Education Program (RCEP) for select technical training.

#### Intelligent connected devices are now a fact of life

In many segments they control much of the world's critical infrastructure. But they also expose industries and consumers to cyber threats. According to Gartner, nearly 20% of organizations have observed at least one IoT-based attack in the past three years.

In the IT and OT technologies the UPS (Uninterruple Power Supply) covers a critical role. A UPS is equipment that works continuously 24/7, 365 days per year to secure high quality electrical power to your critical load. The system necessitates regular maintenance to avoid unexpected downtime. Remote monitoring helps to minimize any availability risk—it is like having 24/7 virtual Eaton specialist on site. This session walks you through how to effectively integrate cybersecurity best practices into remote monitoring design to secure your power availability and connected equipment against cyber threats



**Presented by** Massimo Mannelli Product Manager for UPS Services, EMEA

Massimo drives the service business in EMEA toward a more customer-oriented offering, leveraging Big Data analytics to deploy new IoT solutions. He has 17+ years of experience developing and supporting new products, services and technologies for power conversion and energy management in the Power Quality Division—and is uniquely balanced between technical and commercial knowledge. Massimo is desperately trying to introduce the beauty of polyphonic and brass music together with an Italian cousin to a family more keen on cooking Finnish sausages and looking for Pokemons at summer cottage.

Eric Rueda

Eric is dedicated to supporting customers and partners as



Commercial Leader Software & Connectivity Power Quality, EMEA

they digitize their power infrastructure and increase their cyber resiliency. With 25 years of experience delivering IT and digital projects worldwide, he is always thrilled supporting customers on their path to a digital world that is constantly evolving. When not connected, try the Alps, where Eric will be found hiking somewhere there or any nearby mountain.

#### Trends in Public Key Infrastructure (PKI) automation

How an organization manages their PKI and obtains security certificates is more important than ever due to the proliferation of M2M interactions between IoT devices, mobile, web, and cloud-based applications and services. This presentation will cover some of the new trends in PKI automation including the use of RESTful API, IT automation software such as Ansible, and the Automated Certificate Management Environment (ACME) protocol in conjunction with nonprofit Certificate Authorities (CA) against cyber threats.



**Presented by James Martin Global Connectivity** Product Manager

James defines the vision for Eaton connectivity solutions within the Power Quality Division. He collaborates with regional sales, technical support and product management to develop a global connectivity strategy and create a product roadmap that will align Eaton's business objectives with customers' needs.

# Electric Vehicle (EV) embedded software authentication, secure-boot and FOTA

Today's vehicles have dozens of small embedded computers on board, controlling and monitoring nearly every system. For electrical vehicles, the usage of computers is even more demanding; providing intelligence and control for the powertrain, batteries and even connectivity to public charger stations—basically a point of sale exchanging private and monetary information. This increasingly intelligent and digital design presents cybersecurity challenges and risks. For instance, if malicious software is installed, the results could jeopardize the safety of the vehicle and directly affect the bottom line, with possible irreparable damages to the manufacturer brand. In this session, we explore options to improve vehicle cybersecurity through the implementation of Software Authentication, Secure Boot and FOTA (Firmware Over The Air) updates.



Presented by **Chaitali Sant** 

Lead Engineer, Cybersecurity

Chaitali gained practical expertise from working with multiple OEMs and on a range of automotive cybersecurity activities, from threat modeling of autonomous vehicle features to PKI. She's adding cybersecurity mechanisms in electric vehicle ECUs to make them resilient to cyber attacks. Chaitali is a bird watcher and traveler.

#### Did you know that around 90% of the global international trade is transported by the maritime sector?

Due to the importance of the maritime industry, the vessels, ports and related systems are getting more and more connected to make the maritime supply chains and operations more efficient. This increased connectivity, along with more automated and interconnected systems have made cybersecurity an important aspect of the day-to-day operations; from malware protection and network segregation to incident response and readiness.



**Presented by Derek Bryans EMEA Business** Development Manager Marine and Offshore

Derek is dedicated to supporting global marine customers with a focused and detailed service that truly optimizes the "One Eaton" ethos. With 30 years in the electrical sales and business development arena, he brings passion, fun, enthusiasm, knowledge and skills honed from working in UK and Australia. Rugby is his sanity checker; he and his daughter are season ticket holders for the Scottish national sides.



UNIVERSITY OF **PLYMOUTH**  **Dr. Kimberly Tam** Lecturer in Cybersecurity Dr. Tam is interested in unique areas of cybersecurity, starting with smartphones during her PhD and currently around the maritime sector. She earned a BS in computer and system engineering from Rensselaer Polytechnic Institute (US) and an information security PhD from Royal Holloway University of London (UK). Kimberly likes cake, but she's not very good at making it.

#### Defense in-depth solution

You may never be attacked by a serious hacker, but typical control networks are extremely vulnerable to simple day to day security and reliability issues. Human errors, poor network segmentation and unprotected points of entry into the network, 'soft' targets such as un-patched PCs and vulnerable PLCs, can result in significant production losses and even safety issues. New intrinsically safe industrial security solutions have changed the way industrial ethernet security is managed by providing an intrinsically secure solution right out of the box. This provides a simple, effective cybersecurity solution for control and automation engineers which does not require IT skills for configuration and installation, saving significant time and cost investments.



**Presented by Niaz Ahmed** Associate Product Line Manager

Niaz is a professional with 15 years of experience in sales, marketing and technical product management. He likes to make sure customers are heard, and his products/solutions meet their needs. Niaz worked in Bangladesh and Sweden before settling in the UK and is passionate about traveling all around the world.

#### Secure electrical monitoring system

An electrical power monitoring system helps to maximize the uptime and safety of a facility by providing real-time remote visibility, alerts and insights to the business operations. The criticality of these systems necessitates regular maintenance to avoid unexpected downtime. This presentation will address how to effectively integrate cybersecurity best practices into your existing maintenance routine to secure your power monitoring system and connected equipment against cyber threats.



Presented by **David Larson** Product Manager, Cybersecurity Services & EPMS Software

In continual pursuit of operational excellence, Dave seeks to empower customers to maximize the safety, security and uptime of their operations. Having spent over a decade developing and selling integrated solutions, he enjoys collaborating with customers to tailor offerings for their specific applications and business models. Outside of the

## Advanced technical cybersecurity topics

Dig deep into the integral technologies needed to bring dependable products and platforms to market.

Review our sessions and meet our educators:

#### Cybersecurity as part of lifecycle management

Cybersecurity can be effectively integrated into an overall lifecycle maintenance program. An overview of Industrial Control System (ICS) maintenance practices are presented along with recommendations on how to integrate into overall lifecycle maintenance.

#### Securing legacy systems

For ICS applications, it is not always possible or practical to patch or update a system to address vulnerabilities. Cost, availability, safety, regulatory, personnel, and other factors eliminate upgrading as an option. Basic techniques (assessment, boundary defenses, and ICS specific monitoring) to identify and address cybersecurity on these systems is presented.





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#### Presented by **Anthony Ciccozzi**

Cybersecurity Specialist

Anthony provides internal consulting for cybersecurity as it relates to embedded systems, distributed energy systems, communication and control applications and various standards/ frameworks, including NERC CIP, IEEC 62443, IEEE 1686 and the NIST Risk Management Framework (RMF). He has over 20 years of experience developing solutions and delivering services for the utility, oil and gas, rail/transit and mining industries. Anthony is a Global Industrial Cybersecurity Professional (GICSP) from the SANS institute, holds a Project Management Professional (PMP) certification from PMI and is a licensed Professional Engineer (PE) in New York.

## Cybersecure supply chain

This session brings to light the cyber risks that can creep into devices, systems, software and services if supply chains do not take care of cybersecurity. In this session we'll dive into various supply chain related cyber risks, complexities involved in mitigating those risks and offer some proven approaches that help protect asset owners, software vendors and device manufacturers.

We'll also explore mitigation tactics like cybersecurity certifications, device security testing & various other techno-legal methodologies to help mitigate the cyber risk along the lifecycle of devices, systems, software and services.



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#### **Presented by Frank Sanjay** Manager Cybersecurity Center of Excellence, Eaton India Innovation Center, Pune

Frank helps customers by driving Eaton's "Secure by Design" philosophy in various intelligent products, providing technical guidance to the global product engineering teams for implementing cybersecurity. He leverages hard-earned practical expertise from more than 17 years of hands-on cybersecurity assessments, technology risk management and leading highly technical cybersecurity teams. When he's not solving complex cybersecurity challenges, Frank plays his keyboard, collaborating with other musicians and recording music videos of his kids and other talented teens in his community.



#### Cyber resiliency

Eaton will discuss the overall cyber risk and resiliency of critical infrastructure, and the role of various stakeholders in cyber resiliency. The presentation will focus on the operational and business impacts of cyber breaches, going through some quick examples of the financial risks for not having adequate investment in cyber measures.





**Presented by** Salam BaniAhmed, PhD Lead Engineer, Power Systems Cybersecurity

Salam develops new technologies to boost the smart grid's resiliency against cyberattacks through offensive mechanisms. He possesses interdisciplinary expertise in foundational support systems for smart grid theoretical and practical designs, spanning from code to enterprise level. Salam has published numerous research and technical papers on related topics.

Salam strives to create a balance between work, life and tranquility, resorting to nature to learn how/why things work.

#### Secure by design

The connected world depends on security. As more and more intelligent connected products enter our everyday life, security becomes essential. The Secure by Design philosophy assures that products incorporate cybersecurity into their design. Secure by Design relies on the Secure Development Lifecycle to incorporate cybersecurity at every step of the development process. With evolving systems becoming ever more complex, cybersecurity is a never-ending journey, and we will show you how to plot your course.





Presented by **Matthew Adams** Senior Specialist Cybersecurity

Matthew enables the design and development of secure solutions through the application of critical thinking and security best practices. He has over 15 years of experience designing, developing, testing and supporting hardware and software solutions. Outside of work, he likes to use his engineering skills to modify, create or enhance everyday things.



A more connected world needs more trusted environments. Explore our approach to managing a defense against emerging cybersecurity threats and view our on-demand global forum and educational program.

#### Eaton.com/CybersecurityPerspectives