RSA[°]Conference2020

San Francisco | February 24 – 28 | Moscone Center



RSAC 2020 and the IoT Edge

With 500+ sessions and 30 Keynotes to possibly attend during the show, it is important to be strategic with your time to get the most from RSAC 2020. Allegro can help – we have put together our Annual IOT EDGE PLAYBOOK for RSAC 2020 highlighting specific sessions and keynotes that are directly applicable to security issues for IoT edge devices.

When you have a chance – Stop by our booth #4610 and let's talk security. We look forward to seeing you on the IOT EDGE!

allegrosoft.com/rsac2020

SUMMARY



Monday

Emerging Threats

Monday, February 24 8:30AM - 5:00PM Moscone West

Tuesday

Shodan 2.0: The World's Most Dangerous Search Engine Goes on the Defensive

Tuesday, February 25 11:00AM - 11:50AM Moscone West

Using the Hacker Persona to Build Your DevSecOps Pipeline Tuesday, February 25

11:00AM - 11:50AM Moscone West

Bringing Down the Empire—The Internet of Medical Things (IoMT) Tuesday, February 25

1:00PM - 1:50PM Moscone South

Market Trends in DNS Privacy Doh and DoT

Tuesday, February 25 1:40PM - 2:00PM Moscone South

Security Starts Here ... Identity

Tuesday, February 25 2:10PM - 2:30PM Moscone South

CyBEER Ops Tuesday, February 25 4:00PM - 6:00PM

Wednesday

Practical Use of MUD Specification to Support Access Control in the IoT Wednesday, February 26 8:00AM - 8:30AM Moscone South

Creating a Minimum Security Baseline & Aligned Standards for Consumer IoT Wednesday, February 26 8:00AM - 8:50AM Moscone West

Building a Comprehensive IoT Security Testing Methodology Wednesday, February 26

9:20AM - 10:10AM Moscone West

Product Security Meets Human Life: Inoculating Medical Devices Wednesday, February 26 10:00AM - 10:30AM Moscone South

Stopping the Proliferation of IoT Botnets: Is Dynamic Analysis the Answer? Wednesday, February 26 1:30PM - 2:20PM Moscone South

HTTPS: Why Privacy Doesn't Equal Security Wednesday, February 26

1:30PM - 2:20PM Moscone South

What's in the Box? Software Bill of Materials for IoT Wednesday, February 26 1:40PM - 2:10PM Moscone South

Next-Gen IoT Botnets 3: Bad Implementations of Good Cloud Platforms Wednesday, February 26 2:20PM - 2:50PM Moscone South

Have You Secured Your Un-agentable Things?

Wednesday, February 26 2:40PM - 3:00PM Moscone South

Thursday

Industry Standards to Support Supply Chain Risk Management for Firmware Thursday, February 27

8:00AM - 8:30AM Moscone South

Putting Access Management for the Internet of Things into Practice with MUD

Thursday, February 27 8:00AM - 8:50AM Moscone West

You, Me and FIPS 140-3: A Guide to the New Standard and Transition

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MITRE ATT&CK: The Sequel

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Top 10 List for Securing Your IT/OT Environment

Thursday, February 27 9:20AM - 10:10AM Moscone West

IoT Bug Hunting: From Shells to Responsible Disclosure

Thursday, February 27 10:00AM - 10:30AM Moscone South

Evolution of AlOps to Watch over Smart City IoT Thursday, February 27

11:20AM - 11:50AM Moscone South

Automotive/IoT Network Exploits: From Static Analysis to Reliable Exploits

Thursday, February 27 1:30PM - 2:20PM Moscone West

Emerging Threats

Monday, February 24 8:30AM - 5:00PM Moscone West

H U M A N E L E M E N .

Participants

Deborah Blyth CISO, State of Colorado

Chris Cochran Threat Intelligence Lead, Netflix

Joel DeCapua Special Agent, FBI

Jon DiMaggio Sr. Threat Intelligence Analyst, Symantec

Michael Ekstrom Lead Cybersecurity Engineer, National Cybersecurity Center of Excellence

Timothy Gallo Solutions Architect, Service and Intelligence, FireEye

William Hall Senior Counsel, US Department of Justice, Computer Crime and Intellectual Property Section

Amanda House Data Scientist, McAfee

Daniel Kapellmann Zafra Technical Analysis Manager, Cyber Physical, FireEye Jin Wook Kim

CERT Manager, WINS

Related RSA Articles

Sherin Mathews Senior Data Scientist, McAfee

Anthony Nash Director of Cyber Intelligence Strategy Anomali

Dick O'Brien Principal Editor, Symantec

Nicole Perlroth Investigative Journalist, NY Times

Lieutenant Gustavo Rodriguez Lieutenant, FBI NY Cyber Task Force, NYPD

David Sancho Senior Threat Researcher, Trend Micro

Anne Townsend Principal Cybersecurity Engineer, National Cybersecurity Center of Excellence

William Wade Chief Information Security Officer, City of Atlanta

Wendi Whitmore Global Lead, X-Force Incident Response, IBM

- Security Investigative Journalists Speak Out (Nicol Perlroth)
- RSAC TV: CBSi Interview with Wendi Whitmore
- I Find Your Lack of Security Strategy Disturbing (Deborah Blyth)

Related Internet Articles

- Show 138: Nicole Perlroth Discusses Life as a Cyber Security Journalist
- Task Force Takes 'Whole Government' Approach (Gustavo Rodriguez)
- Ransomware (Wendi Whitmore)
- Make Your Own Luck: Key Strategies for Building Your Career (Wendi Whitmore)
- A short history of cyber espionage (Dick O'Brien)
- Working in Cyber Security: "Work for the role you want to be in and not the role you are in today" (Jon DiMaggio)
- Examining the Thriving Underground Software Business (David Sancho)
- Colorado builds internal firewalls to amp up cybersecurity (Deborah Blyth)
- ICS Tactical Security Trends: Analysis of the Most Frequent Security Risks Observed in the Field (Daniel Kapellmann Zafra)
- Fantastic information and where to find it: a guidebook to open-source OT reconnaissance (Daniel Kapellmann Zafra)
- Meet The Former Marine Who Went Viral Joining Netflix as Threat Intelligence Lead (Chris Cochran)
- Ransomware: Defending Against Digital Extortion (Timothy Gallo)

Event Link

https://www.rsaconference.com/usa/agenda/emerging-threats



Welcome Session

Monday, February 24 5:00PM - 7:00PM Show Floor - Booth #4610

IOT EDGE PLAYBOOK

Participants

We invite everyone to kick-off RSAC 2020 with drinks and hors d'oeuvres as you preview solutions from leading information security organizations and IoT vendors in the Expo.

We especially invite everyone to stop by the Allegro Booth #4610 to learn more about securing the IoT edge.

Shodan 2.0: The World's Most Dangerous Search Engine Goes on the Defensive

Tuesday, February 25 11:00AM - 11:50AM Moscone West

IOT EDGE PLAYBOOK

Participants

Dr. Michael Mylrea

Senior Technical Advisor for Cybersecurity Pacific Northwest National Laboratory

- Michael Mylrea's research while affiliated with Pacific Northwest National Laboratory and other places
- Buildings Cybersecurity: Opportunities, Challenges and Solutions
- Blockchain Unchained: Cybersecurity Implications & Market Overview



Using the Hacker Persona to Build Your DevSecOps Pipeline

Tuesday, February 25 11:00AM - 11:50AM Moscone West

IOT EDGE PLAYBOOK

Participants

Dr. Aaron Estes Lockheed Martin Fellow Lockheed Martin Corporation

Robin Yeman Lockheed Martin Fellow Lockheed Martin

- Speed of Delivery using Agile for Hardware Robin Yeman
- DoD Science Board Report Robin Yeman
- How large government contractors are utilizing Agile and DevOps
 Suzette Johnson and Robin Yeman



Bringing Down the Empire— The Internet of Medical Things (IoMT)

Tuesday, February 25 1:00PM - 1:50PM **Moscone West**



IOT EDGE PLAYBOOK

Participants

Axelle Apvrille Principal Security Researcher Fortinet

Aamir Lakhani Senor Red Team Researcher Fortinet

Related Internet Articles

Axelle Apvrille

- Reversing Internet of Things from Mobile Applications
- Cryptocurrency mobile malware
- PhOwn smart devices CTF: Behind the Scenes
- Medical IoT for diabetes and cybercrime

Aamir Lakhani

- Threat Landscape Trends TheCube
- Cybersecurity Threat Landscape
- Code Wars
- Understanding Cryptocurrencies, Bitcoins, and Blockchains LiveLessons
- Investigating the Cyber Breach: The Digital Forensics Guide for the **Network Engineer**
- Digital Forensics and Cyber Crime with Kali Linux Fundamentals LiveLessons

Market Trends in DNS Privacy DoH and DoT

Tuesday, February 25 1:40PM - 2:00PM Moscone South (Infoblox)



Topic

Two evolving improvements to DNS privacy have recently made the news: DNS over HTTPS or "DoH" and DNS over TLS (Transport Layer Security) or "DoT." We want to educate you on what these changes to DNS are, why they are coming about, and our recommendations on what companies should do to act now, as both mechanisms change how DNS operates, and they create difficulties for security administrators by circumventing established DNS security controls. Interesting to see how this might effect IoT devices at the edge of a network.



Security Starts Here ... Identity

Tuesday, February 25 2:10PM - 2:30PM Moscone South (One Identity)

IOT EDGE PLAYBOOK

Topic

Often missed in the bright lights of innovation, digital transformation and a move to the cloud is the immutable reality that security can't be ignored. This session highlights the benefits of simple identity practices and integrated solutions. You will walk away with an understanding of how to secure your organization and establish a rock-solid foundation of identity governance and administration, and privileged access management.



Tuesday, February 25 4:30PM - 6:00PM



Participants

We invited everyone to the Expo floor to sample CyBEERs from around the globe.

Don't forget to stop by the Allegro Booth #4610 to discuss the latest in IoT edge device security.

HUMANELEMENT

Practical Use of the MUD Specification to Support Access Control in the IoT

Wednesday, February 26 8:00AM - 8:30AM Moscone South IOT EDGE PLAYBOOK

Participants

Dr. Parisa Grayeli Manager, NCCoE MUD Laboratory Mitre/NCCoE

Blaine Mulugeta Cyber Security Engineer Mitre/NCCoE

Related Internet Articles

Blaine Mulugeta

- Won't Get Fooled Again: The expected future of IoT malware and what to do about it.
- Multifactor Authentication for E-Commerce



Creating a Minimum Security Baseline and Aligned Standards for Consumer IoT

Wednesday, February 26 8:00AM - 8:50AM Moscone West

IOT EDGE PLAYBOOK

Participants

Jasper Pandza

Standards Development Lead for Consumer IoT Security UK Department for Digital, Culture, Media and Sport (DCMS)

- ETSI standard on consumer IoT security: key steps to secure 'smart' products
- Improving the Security of Consumer IoT: A New Code of Practice
- Plutonium and China's Future Nuclear Fuel Cycle

Building a Comprehensive IoT Security Testing Methodology

Wednesday, February 26 9:20AM - 10:10AM Moscone West

IOT EDGE PLAYBOOK

Participants

Deral Heiland Research Lead, IoT Rapid7

- Rapid7 Blog
- DerbyCon 2018, Deral Heiland's 'Hardware Slashing, Smashing And Reconstructing For Root Access'
- Deral Heiland, Seamless Podcast with Darin Andersen
- Deral Heiland & Abyss of Cybersecurity John Bumgarner
- How a security researcher is tackling IoT security testing



Product Security Meets Human Life: Inoculating Medical Devices

Wednesday, February 26 10:00AM - 10:30AM Moscone South





IOT EDGE PLAYBOOK

Participants

Sara Bohan Senior Information Security Analyst Mayo Clinic

Adam Brand Managing Director PwC

Tara Larson Chief Security Architect-Product Security Director Abbott

Scott Nichols Director, Global Product Privacy and Cybersecurity Danaher/Beckman-Coulter

Related RSA Article

Adam Brand

• Medical Device Security: Getting Executive Buy-In

Related Internet Articles

Adam Brand

- Why medical device security is something we should all care about
- Putting medical device security to the test reveals many vulnerabilities
- Medical Devices: Pwnage and Honeypots
- BlueKeep: The latest reminder of our responsibility with connected medical devices
- Medical device security: patient safety and cost considerations

Tara Larson

- Medical Device Cybersecurity Risk Mitigation
- Responding to Challenges in Medical Device Security?

Stopping the Proliferation of IoT Botnets: Is Dynamic Analysis the Answer?

Wednesday, February 26 1:30PM - 2:20PM Moscone South

HUMANELEMEN.



Participants

Mounir Hahad Head of Juniper Threat Labs Juniper Networks

Khurram Islah Sr. Staff Engineer Juniper Networks

Related Internet Articles

Mounir Hahad

- New 'unknown' data breach shows the danger of multicloud
- Equifax, USMC breaches call for more monitoring and credit freezes
- Ransomware-as-a-Service: Hackers' Big Business
- RSA2018 With Dr. Mounir Hahad, Ph. D,, Head of Juniper Threat Labs

HTTPS: Why Privacy Doesn't Equal Security

Wednesday, February 26 1:30PM - 2:20PM Moscone South

HUMANELEMENT



IOT EDGE PLAYBOOK

Participants

David Dufour

Vice President of Cybersecurity and Engineering Carbonite, an OpenText Company

Hal Lonas

Senior Vice President and CTO, SMB and Consumer OpenText

Related Internet Articles

David Dufour

- Cyber Security with David Dufour
- Post RSA 2018 Interview with Webroot's David Dufour
- Interview: David Dufour, Senior Director of Cybersecurity & Engineering, Webroot

Hal Lonas

- Cybersecurity: An Asymmetrical Game of War
- Hal Lonas on how enterprises are using machine learning for security
- HTTPS: Security vs Privacy | Webroot
- Cybersecurity Sit Down: The Future of Cybersecurity for SMBs | Webroot

What's in the Box? Software Bill of Materials for IoT

Wednesday, February 26 1:40PM - 2:10PM Moscone South



IOT EDGE PLAYBOOK

Participants

Dr. Allan Friedman Director of Cybersecurity NTIA / US Department of Commerce

Related RSA Article

• Revisiting Public-Private Collaboration: Asian and Global Perspectives

- Redefining Cybersecurity
- Cyber Safety and Resiliency at the Internet Infrastructure Layer
- Analysis: Changes in US spy programme
- Creating Economic Incentives for Cybersecurity
- Cybersecurity expert on NSA spying and Obama's policy reform
- Transparency of SW and IoT Components: An Open Approach to Bill of Materials
- Software Bill of Materials (SBOM)
- Cybersecurity researcher Allan Friedman said he is skeptical of Edward Snowden's claim...

Next-Gen IoT Botnets 3: Bad Implementations of Good Cloud Platforms

Wednesday, February 26 2:20PM - 2:50PM Moscone South

HUMANELEMENT

IOT EDGE PLAYBOOK

Participants

Alex Jay Balan Chief Security Researcher Bitdefender

Related RSA Article

• Legal Implications in Ethical Disclosure

- Exploiting Cloud Synchronization to Hack IOTS
- Privacy: Between Hype and Need
- Next gen IoT Botnets 3 moar ownage
- Short bio

Have You Secured Your Un-agentable Things?

Wednesday, February 26 2:40PM - 3:00PM Moscone South (Armis)

IOT EDGE PLAYBOOK

Topic

SCADA and OT devices. Blood infusion pumps and ventilators. Smart TVs, badge readers, and access points. These are a few un-agentable things—and hackers know it. These devices are the new threat landscape. They have no security, they can't be updated easily, and they can't host agents. So how can you stay protected? Join Armis and learn about real-life exploits and how to secure these devices.

Industry Standards to Support Supply Chain Risk Management for Firmware

Thursday, February 27 8:00AM - 8:30AM Moscone South



Participants

Lawrence Reinert Computer Systems Researcher National Security Agency

Monty Wiseman Principal Engineer, Cybersecurity GE Research

Related Internet Articles

Monty Wiseman

- Trusted Supply Chain and Remote Provisioning with the Trusted Platform Module
- A Canonical Event Log Structure for IMA



Putting Access Management for the Internet of Things into Practice with MUD

Thursday, February 27 8:00AM - 8:50AM Moscone West



IOT EDGE PLAYBOOK

Participants

L. Jean Camp Professor Indiana University

Drew Cohen Chief Executive Officer MasterPeace Solutions Ltd

Eliot Lear Principal Engineer Cisco - Enterprise Chief Technology Office

Mudumbai Ranganathan Computer Engineer National Institute of Standards and Technology

Darshak Thakore Principal Architect CableLabs

Related Internet Articles

Drew Cohen

- The Technado, Episode 101: MasterPeace Solutions' Drew Cohen
- Masterpeace Solutions President and CEO Drew Cohen: Full Interview
- MasterPeace CEO Drew Cohen Technado Podcast Interview

Eliot Lear

- Roles and RFCs
- It's Not the Doorbell, It's the Cloud
- Cited articles

Mudumbai Ranganathan

• Publications

Darshak Thakore

- Micronets: Enterprise-Level Security Is No Longer Just For Enterprises
- CableLabs® Micronets: A New Approach to Securing Home Networks

You, Me and FIPS 140-3: A Guide to the New Standard and Transition

Thursday, February 27 8:00AM - 8:50AM Moscone West



Participants

Ryan Thomas CST Laboratory Manager Acumen Security

Related RSA Article

• Quick Look: You, Me and FIPS 140-3: A Guide to the New Standard and Transition

MITRE ATT&CK: The Sequel

Thursday, February 27 9:20AM - 10:10AM Moscone West

IOT EDGE PLAYBOOK

Participants

Freddy Dezeure CEO Freddy Dezeure BVBA

Richard Struse Chief Strategist, Cyber Threat Intelligence MITRE Engenuity

Related RSA Articles

Freddy Dezeure

- RSAC TV: Interview with Freddy Dezeure
- Assessing the EU Threat Landscape
- Frameworks, Mappings and Metrics: Optimize Your Time as CISO or Auditor

Related Internet Articles

Freddy Dezeure

- Testimonial CERT-EU
- Threat Model ATT&CK

Richard Struse

- Threat-Informed Defense and MITRE ATT&CK™
- Interview with Richard Struse
- MITRE's new 'ATT&CK' resource an encyclopedia of cyber threats



Top 10 List for Securing Your IT/OT Environment

Thursday, February 27 9:20AM - 10:10AM Moscone West



IOT EDGE PLAYBOOK

Participants

Dawn Cappelli VP Global Security and Chief Information Security Officer Rockwell Automation

Roy Gundy Head of OT Cyber Security Johnson & Johnson

Related RSA Articles

Dawn Cappelli

• Getting to Know the New RSAC Advisory Board Members: Dawn Cappelli

Roy Gundy

• Security Coming Together: The Convergence of IT and OT

Related Internet Articles

Dawn Cappelli

- Insider Threat: Putting Theory Into Practice
- Practical Advice for Submitting to Speak at a Cybersecurity Conference
- IT OT Cybersecurity Convergence Panel Discussion ARC Industry Forum 2019 Orlando

IoT Bug Hunting: From Shells to Responsible Disclosure

Thursday, February 27 10:00AM - 10:30AM Moscone South

HUMANELEMENT



IOT EDGE PLAYBOOK

Participants

Shaun Mirani Security Analyst Independent Security Evaluators

Ian Sindermann Associate Security Analyst 2 Independent Security Evaluators

Related Internet Articles

Shaun Mirani

- Remotely Exploiting IoT Pet Feeders
- ASUS Routers Overflow with Vulnerabilities
- Show Mi The Vulns: Exploiting Command Injection in Mi Router 3
- Hack Routers, Get Toys: Exploiting the Mi Router 3
- Over a Dozen Vulnerabilities Discovered in ASUSTOR AS-602T
- VPNFilter Threat How to Prevent, Detect and Mitigate
- Unauthenticated Remote Code Execution in Asustor AS-602T (CVE-2018-12313)

lan Sindermann

- Hardware Hacking 101 Lesson 1: Beauty, Your Home Lab and Basic Electronics
- Hardware Hacking 101 Lesson 2: Classical Hardware Hacking
- Hardware Hacking 101 Lesson 3: Abusing UART (U Are RooT)
- PART 1: DEF CON Badgelife Hardware Hacking Introduction In-Circuit Serial Programming (ICSP)

Evolution of AlOps to Watch over Smart City IoT

Thursday, February 27 11:20AM - 11:50AM Moscone South

IOT EDGE PLAYBOOK

Participants

Darren Bennett Deputy Director, Chief Information Security Officer City of San Diego Thomas Caldwell CTO Techniche

Related Internet Article

Darren Bennett

• Bio

Automotive/ IoT Network Exploits: From Static Analysis to Reliable Exploits

Thursday, February 27 1:30PM - 2:20PM Moscone West

IOT EDGE PLAYBOOK

Participants

Jonathan Brossard CEO Moabi

- DEF CON 24 Jonathan Brossard Intro to Wichcraft Compiler Collection
- Moabi Post Memory Corruption Memory Analysis Blackhat 2011 Research
- Moabi Hardware Backdooring Is Practical Blackhat 2012 Research
- Interview with Jonathan Brossard, CEO @ MOABI

