







DAY 1 • NOVEMBER 5, 2019

Nov 5	Track 1 Room M1	Track 2 Room M6	Track 3 Open stage	Track 4 Room M5	Track 5 Room M3	Track 6 Room M4
08.55	Grand Release of the new updated and reworked Smartare Elektronikhandboken 2.0 (Open Stage)					
09:10-09:40	Edge Computing Hosted by  Hello Possibility.	Embedded security Hosted by: 	Hardware solutions	Next gen wireless IoT infrastructure	Workshop	Embedded software development and use Hosted by: 
	9:10 Implementing Cloud at the Intelligent Edge Presenter: Iisko Lappalainen, MontaVista Software	9:10 Towards Secure Embedded Hardware Platforms: Attacks and Countermeasures Presenter: Youssa Alkabani, Halmstad University	9:10 Solving electro-mechanical integration challenges during an IoT product development process Presenter: Arjun Bingipur, Dassault	9:10 From Data Collection to Critical Machine-Type Communications: Challenges and Trends Presenter: James Gross, KTH Royal Institute of Technology	9:10 Best practice on debugging and tracing your embedded system using Lauterbach! Presenter: Nohau Solutions	9:10 Indiana Jones and the Secret of Fast Vision Development Presenter: Andrea Leopardi, BitSim
09:40-10:20	KEYNOTE 1, ROOM M1					
	Open Source in the manufacturing industry , Presenter: Steffen Evers, Bosch Software Innovations					
10:20-11:00	COFFEE & EXHIBITION					
11:00-12:00	IoT in the cloud 11:00 KEYNOTE 2: Unlocking Industry value out of IoT and AI Presenter: Colin Williams, IBM Watson IoT <i>40 mins</i>	Bluetooth communications and features 11:00 Experience from two years with Bluetooth mesh sensor network Presenter: Pelle Svensson, u-blox	Software quality, testing and maintenance 11:00 Open Source Software and Mission-Critical Embedded Systems – like oil and water? Presenter: Mark Richardson, LDRA	Next gen wireless IoT infrastructure 11:00 Security in development/ deployment/ service/firmware update over the air Presenters: Per Nørgaard Christensen and Jens Barkvall, Prevas <i>60 mins</i>	Workshop 11:00 Best practice on debugging and tracing your embedded system using Lauterbach! <i>Contd.</i>	Embedded software development and use 11:00 IoT Design: An Approach to Design Resilient, Robust, Reliable Secure Systems Presenter: Niklas Larsson, Microchip Technology <i>60 mins</i> Sponsored by: Mouser Electronics
		11:30 Location Services and Direction Finding with Bluetooth Presenter: Martin Woolley, Bluetooth SIG	11:30 Code reuse, myth or reality? Presenter: Rafael Taubinger, IAR Systems			
12:05-12:20	OPENING SPEECH (Open Stage)					
	Ted Schönbeck, Google Cloud					
12:20-13:30	LUNCH & EXHIBITION					
13:30-14:10	KEYNOTE 3, ROOM M1					
	AI – from hype to reality , Presenter: Ted Schönbeck, Google Cloud					
14:10-15:10	Open source	Embedded security Hosted by: 	AI and machine learning Hosted by: 	Next gen wireless IoT infrastructure	Industrial solutions	Embedded software development and use
	14:10 INVITED SPEAKER: Driving Device Connectivity at the IoT Edge Presenter: Richard Barry, Amazon Web Services <i>40 mins</i>	14:10 What's your state of security? Presenter: David Källberg, IAR Systems	14:10 Deep Learning: Going from unlabeled data to a trained network on a target Presenter: Emelie Andersson, MathWorks	14:10 Technology pros and cons (NB IoT/Sigfox/ LoRa) Presenter: Jens Barkvall, Prevas <i>60 mins</i>	14:10 Low-cost FPGA-based Light Neural Networks for Industrial Defect Detection Presenter: Sujeeth Joseph, Ignitarium	14:10 Understanding and Applying the IIC's Industrial Internet Connectivity Framework (IICF) Guidance Presenter: Reiner Duwe, Real-Time Innovations (RTI) <i>60 mins</i>
		14:50 Lessons learned after years of real-world Consumer IoT Products security evaluations (and what to do next) Presenter: Dr Johannes Bauer, UL	14:50 Workload consolidation all the way down to the machines on the factory floor Presenter: Christian Eder, congatec		14:50 From lab to field – How to approach the challenges in adopting Time Sensitive Networking (TSN), the enabler technology for cost efficiency in Industry 4.0 Presenter: Norbert Hauser, Kontron Europe	
15:10-15:50	COFFEE & EXHIBITION – Presentation of Smartare Elektronikhandboken 2.0					

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15:50-16:50	Safety & AI	Embedded software development and use	Open source	Next gen wireless IoT infrastructure	Embedded software development and use	Software testing, development and maintenance
	15:50 INVITED SPEAKER: Provably safe robotics Presenter: Jana Tumova, KTH 40 mins	15:50 Shifting-Left Together – Enabling the Ecosystem with Virtual Platforms Presenter: Jakob Engblom, Intel	15:50 To boldly go where Linux cannot with Zephyr and Eclipse IoT Presenter: Frédéric Desbiens, Eclipse Foundation	15:50 When and How to deploy your own IoT network Presenter: Rune Domsten, Indesmatech 60 mins	15:50 Building Scalable Security for Distributed Systems Presenter: Sara Granados, Real-Time Innovations (RTI) 60 mins	15:50 Automating Test Maintenance as Code and Requirements Change Presenter: Matt Davis, QA Systems
		16.20 Simplify your design with new-school C18 and C++17 language extensions! Presenter: Bertil Spolander, IAR Systems	16.20 Combining Open Source with modern software engineering methodologies and system simulation: a glimpse in the future of Linux-based embedded development Presenter: Matias Sundman, Wind River			16:20 Introduction to Docker Presenter: Niall Cooling, Feabhas
17:00-18:00	Industry Reception and presentation of the winners of the Swedish Embedded Award 2019					

DAY 2 • NOVEMBER 6, 2019

Nov 6	Track 1 Room M1	Track 2 Room M6	Track 3 Open stage	Track 4 Room M5	Track 5 Room M3	Track 6 Room M4
09:10-09:40	AI and machine learning	Operating Systems	Embedded security	Operating systems	Embedded software development and use	Open Source
	9:10 IoT and AI solutions Presenter: Alastair Worth, Avnet Integrated Solutions	9:10 Selecting an Embedded Operating System Presenter: Colin Walls, Mentor	9:10 Best practices for IoT Device Security Presenter: Alan Grau, Sectigo	9:10 Virtualization impact on performance in embedded systems Presenter: Marcus Nissemark, Green Hills Software	9:10 Robust data propagation and control in a cloud infrastructure Presenter: Karl-König Königsson, Mimer Information Technology	9:10 Anatomy of a Cloud Native environment: Serving the Far Edge and the Edge Presenter: Tomas Holmberg, Wind River
09:40-10:20	KEYNOTE 4, ROOM M1 How to create an effective security architecture , Presenter: Christian Heinel, Cisco					
10:20-11:00	COFFEE & EXHIBITION – Presentation of Smartare Elektronikhandboken 2.0					
11:00-12:00	Wireless communications	Embedded security	AI and machine learning	Embedded security	Security (workshop)	Embedded systems design
	11:00 Think outside the box – and make a better antenna solution for you gadget or IoT device Presenter: Henrik Landahl, Prevas	11:00 Security from Inception Presenter: Stephan Spitz, Secure Thingz / IAR Systems 60 mins	11:00 INVITED SPEAKER: The future of Cyber-Physical AI Systems Presenter: Fredrik Heintz, Linköping University 40 mins	11:00 How to secure yourself against IoT supply-chain attacks Presenter: Andrew Frame, Secure Thingz 60 mins	11:00 The attack kill chain Presenter: Håkan Nohre, Cisco	11:00 Combining Dataflow Applications and Real-time Task Sets on Future real-time embedded systems Presenter: Hazem Ismail, Halmstad University
	11:30 5G: Challenges and considerations for designing user equipment Presenter: Hans Andersson, ACAL BFI Nordic					11:30 Assuring correct behavior of neural network trained model predictive controllers Presenter: Yuri Durodie, Siemens

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12:05-12:20	Svensk Elektronik & Smartare Elektroniksystem (Open Stage)					
12:20-13:30	LUNCH & EXHIBITION					
13:30-14:10	KEYNOTE 5, ROOM M1					
	Securing IoT Everywhere, Presenter: Richard Elberger, Amazon Web Services					
14:10-15:10	Embedded software development and use	Open Source	IoT systems	Hardware Solutions	Security (workshop)	Software quality, testing and maintenance
	14:10 Seven success factors in Agile product development that you should be highly aware of Presenter: Anders Gustafsson, Prevas	14:10 Eclipse IoT Developer Survey 2019: The Key Findings Presenter: Frédéric Desbiens, Eclipse Foundation 60 mins	14:10 INVITED SPEAKER: Data-centric IoT based on Azure Cloud Presenter: Yu Liu, Linköping University 40 mins	14:10 MeasureWare, Interpret your world – A new approach to precision measurement Presenter: Joern Oppenhaeuser, Analog Devices 60 mins	14.10 The attack kill chain Presenter: Håkan Nohre, Cisco Contd.	14.10 “Code Coverage for Embedded Targets” for Newcomers Presenter: Sabine Poehler, Verifysoft Technology 60 mins
	14:50 Embedded multicore: enablement of heterogeneous OSes and mixed criticality systems Presenter: Colin Walls, Mentor					
15:10-15:50	COFFEE & EXHIBITION					
15:50-16:20	Hardware solutions	Software quality, testing and maintenance	Embedded software development and use	Hardware solutions	Open Source	Hardware solutions
	15.50 Silicon on Thin Buried Oxide process technology enables smart communicating devices that harvest Energy on the edge Presenter: Graeme Clark, Renesas Electronics Europe	15.50 Highly critical systems: How far can you trust your compiler? Presenter: Mark Richardson, LDRA	15.50 Safety and Reliability through Smart High-Level Assertion Synthesis Presenter: Mohammad Riazati, Mälardalen University	15.50 Self-powered sensor systems for the Industrial IoT Presenter: Sebastian Bader, Mid Sweden University	15.50 Embedded development with modern, type-safe C++ Presenter: Jan Ypma, Tradeshift	15.50 Cohabitant automotive radar Presenter: Emil Nilsson, Halmstad University

NB. The program may be subject to change. An updated program will be printed and distributed at the conference. The latest version is always available on www.embeddedconference.se

