



ECS
celebrating
10 years
of success!

EMBEDDED CONFERENCE SCANDINAVIA 2015

NOVEMBER 3-4, 2015
KISTAMÄSSAN, STOCKHOLM
SWEDEN

A leading Embedded and Internet of Things Event

EXCERPTS FROM THE PROGRAM:

- **INTERNET OF THINGS:** Two full days program covering the whole scenario of IoT. From low power sensors and sensor networks to infrastructure and security aspects. We will also look at IoT in practice; Experience from real life projects.
- **SOFTWARE DEVELOPMENT:** Agile methods, Modeling and compiler technology. Software security, test and verification. Open source development with Linux and Android for embedded applications. Windows 10 for IoT.
- **IN-DEPTH TUTORIALS:** HTML5 for embedded and How to secure the Industrial Internet of Things
- **HANDS-ON WORKSHOPS:**
 - Power Design
 - IoT running Open Source
 - ARM9/Linux trace and debug
 - Automatic Test Case Generation
 - Linked-Data and OSLC for Tool Interoperability

SOME OF THE SPEAKERS:



DANIEL MORRIS
Polarion Software



JASON MASTERS
Vector Software



JONAS RUTSTRÖM
MathWorks



COLLIN WALLS
Mentor Graphics

INAUGURATION SPEAKER:



Dr Sara Mazur
Head of Research
Ericsson

KEYNOTE SPEAKER:



The road towards autonomous transport solutions

Daniel Frylmark
Head of Driver Assistance Controls
Scania CV AB

KEYNOTE SPEAKER:



The Internet of Things: Why is the promise taking so long to fulfil?

Professor William Webb
CEO Weightless SIG and President IET

CELEBRATE 10 YEARS OF SUCCESS WITH US!

Welcome to the 10th edition of Embedded Conference Scandinavia, the internationally renowned meeting place for professionals in the field of embedded technology.

It all started by the initiative from member companies and their customers. They wanted a special arena for sharing knowledge about embedded technology, still very unknown at the time. Together we created this conference and exhibition to meet the needs. We got it right.

With 10 years of success Embedded Conference Scandinavia has developed to be one of the most important events for the European embedded industry. Join us to celebrate the anniversary and meet 1 500 dedicated embedded specialists from all over the world.

With the same successful concept, a compact exhibition, a world-class conference and appreciated social activities, Embedded Conference Scandinavia has grown over the years and is now must-attend event for everybody in the European embedded industry. We will as always have international top ranked key-note speakers and this year we will focus especially on the Internet of Things.

And don't miss the Embedded Dinner Party, where the winners of the Swedish Embedded Award are presented. The fabulous band Lady B Goode will really get the party going!

Welcome to join us for the 2015 edition of Embedded Conference Scandinavia and to celebrate 10 years of success with us. We promise it will be memorable!



Lena Norder
CEO
Svensk Elektronik/
The Swedish Electronics Trade Association

Together we create the future for the electronics industry.

Svensk Elektronik has strengthened competitiveness in focus, for our members and for the Swedish electronics industry in total. In power of our members we improve the future for the business.

Svensk Elektronik provides an exclusive network of knowledge, inspiration and business where you meet new partners and customers. We surveil new regulations, inform about new terms in the trade and voice the opinion of the electronics industry.

Embedded Conference Scandinavia is initiated by our members - and of course members are favoured by discounts.

Welcome to a network that empowers you and your business.

The Swedish Electronics Trade Association
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**SVENSK
ELEKTRONIK**

Proudly presents
**embedded conference
scandinavia**
SCANDINAVIAN EMBEDDED CONFERENCE
AN INTERNATIONAL TECHNOLOGY EVENT

KÖR VÅR RALLYTÄVLING OCH FÅ MÖJLIGHET ATT VINNA EN IPAD AIR.



Välkommen på jubileums fika
den 3/11 kl 15.00. Vi bjuder
på tårta då **Prevas fyller 30 år!**



Prevas bildades vid IT-erans genombrott för 30 år sedan och är idag en ledande aktör i Norden inom teknisk produktutveckling, inbyggda system och industriell IT & automation. Innovation för att främja kundernas behov av ökad konkurrenskraft och tillväxt har alltid varit Prevas ledstjärna.

Möt två av våra specialister!

Den 3:e kl 09:15 talar Andreas Rosengren om: *Industry 4.0 – Politics or Technology?*
och den 4:e kl 14.00 talar Kim Højgaard-Hansen om: *Realising Efficient Industrial Linux Development.*

VÄLKOMMERN TILL PREVAS MONTER NR 49-50!

RIV UT & BYT

Ta med denna till vår monter så får du en present.

Namn: _____

Företag: _____

Epost: _____

P.S så långt laget räcker.





WELCOME TO THE INAUGURATION OF ECS 2015

Dr Sara Mazur
Head of Research
Ericsson

NOVEMBER 3 12:00 OPEN STAGE

KEYNOTE PRESENTATIONS AT

EMBEDDED CONFERENCE SCANDINAVIA 2015

November 3 13:20-13:50 • Keynote Presentation:

The road towards autonomous transport solutions

In the transport industry, truck fleet owner's profitability, environmentally friendly solutions and increased safety walks hand in hand on the road towards sustainability. Major improvements are achieved by utilizing Advanced Driver Assistance Systems. These systems fill the gap between fully human-controlled vehicles and completely autonomous vehicles. They increase safety and reliability, while decreasing the CO2 footprint.

This presentation will discuss development strategies and methods to face embedded system challenges in the fascinating and quickly expanding areas of Intelligent Transport Systems and Autonomous Transport Solutions. Rapid advances in increased electrification, simulation driven software development and centralized sensor fusion play key parts. The presentation will also touch on how lean development methods and value driven leadership make the journey towards autonomy an evolution rather than a revolution.



Presenter:
Daniel Frylmark
Head of Driver Assistance Controls
Scania CV AB

Daniel has a Master of Science degree in Applied Physics and Electrical Engineering and has worked with development of Embedded Systems at Scania since 2003. He began as a function developer within Chassis Control Systems and was appointed Senior Engineer within automatic controls in 2007, before changing carrier to focus on leadership in 2008. Since 2011, his main responsibility is development of Advanced Driver Assistance Systems.

November 4 13:20-13:50 • Keynote Presentation:

The Internet of Things: Why is the promise taking so long to fulfil?

The IoT promises much – to make our world work better, improve healthcare, reduce congestion and so much more.

Over 50 billion devices are predicted within a decade. And yet, little has happened to date. The talk discusses why that is and explores the lack of wireless connectivity standards in some areas and the plethora in others. It discusses why this is, how standards are formed and become widely accepted, the key drivers and motivators of the major players in the industry and predicts how we might resolve the connectivity issue and finally get to the promised 50 billion.

It finishes by describing the Weightless standard - the only open standard for wide-area IoT connectivity.



Presenter:
Professor William Webb
CEO Weightless SIG and
President IET

William is CEO of the Weightless SIG, the standards body developing a new global M2M technology. He is a Director at Webb Search, an independent consultancy, and President of the IET – Europe's largest Professional Engineering body.

He was one of the founding directors of Neul, a company developing machine-to-machine technologies and networks, which was formed at the start of 2011 and subsequently sold to Huawei in 2014 for \$25m. Prior to this William was a Director at Ofcom where he managed a team providing technical advice and performing research across all areas of Ofcom's regulatory remit. He also led some of the major reviews conducted by Ofcom including the Spectrum Framework Review, the development of Spectrum Usage Rights and most recently cognitive or white space policy. Previously, William worked for a range of communications consultancies in the UK in the fields of hardware design, computer simulation, propagation modelling, spectrum management and strategy development. William also spent three years providing strategic management across Motorola's entire communications portfolio, based in Chicago.

congatec AG
Lars Hallberg
Regional Sales Manager Nordic
lars.hallberg@congatec.com
Phone: +46 (8) 52509457
Mobile: +46 733 691959



We **simplify** the use of **embedded technology.**

Headquartered in Deggendorf, Germany, congatec AG is a leading supplier of industrial computer modules using the standard form factors Qseven, COM Express, XTX and ETX, as well as single board computers and EDM services. congatec's products can be used in a variety of industries and applications, such as industrial automation, medical, entertainment, transportation, telecommunication, test & measurement and point-of-sale. Core knowledge and technical know-how includes unique extended BIOS features as well as comprehensive driver and board support packages. Following the design-in phase, customers are given support via extensive product lifecycle management. The company's products are manufactured by specialist service providers in accordance with modern quality standards. Currently congatec has entities in Taiwan, Japan, China, USA, Australia and the Czech Republic.

congatec Product Range



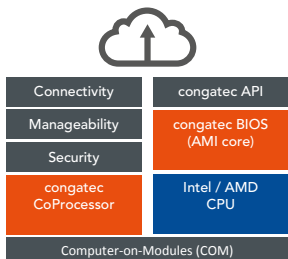
Modules (COM)
Qseven, COM Express, ETX
and XTX



SBC
Industrial Single Board
Computers



EDMS
Design & Manufacturing Services



Embedded Software
BIOS

QSEVEN IOT GATEWAY DEVELOPMENT KIT

conga-QKIT/IOT



Article	PN	Description
conga-QKIT/IOT	077600	Qseven Internet of Things Gateway Kit based on Intel Atom E3827 processor supporting Windriver Intelligent Device Platform (IDP) and Build OS.



www.congatec.com

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Smaller, faster, smarter code with IAR Embedded Workbench. ■



complete code control
high-performance features
user-friendly for real
functional safety certification

**Learn more and meet
us in stand 66-67!**





Our software and expertise help you develop amazing functions in a connected society

NFV on ARM

Enea brings new architectural choice to Network Function Virtualization with an ARM-based reference build based on the collaborative OPNFV project. It delivers the NFV vision across a wide range ARM networking SoCs from AMD, Cavium, Freescale and others.

Authorized Training Partner

We are Linux Foundation Authorized Training Partners, tailoring training programs to your specific needs, either in our Enea training center or in your own office. Get things done faster and better with the market's widest schedule of Linux courses.

Networking Data Plane

Enea drives the revolution of hardware accelerated packet processing in OpenDataPlane, bringing a hardware abstraction layer and a common API allowing reuse of software resources and simplifying migration between hardware platforms.

Yocto Compatible CGL

Enea is initiator, contributor, and maintainer of the Carrier Grade Linux (CGL) meta layer in OpenEmbedded. The initiative specifies the standards of availability ("five-nines," "six-nines"), scalability, manageability and service response characteristics.

VNF Management

Enea's On-Device Management is a framework that provides all of the management functionality you need within a managed device, whether it is a single node or a distributed system, including northbound interfaces like NETCONF, plus YANG data modeling.

Speaking Session **Nov 4 15:30**

Welcome to our speaking session "The future of embedded networking nodes - an open approach to Network Function Virtualization" on how the ARM software community collaborates around development acceleration and innovation within the NFV domain.

Booth #60

www.enea.com



AUTOMOTIVE



CONSUMER



DEFENCE



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SMART GRID



TELECOMS

SECURING THE INTERNET OF THINGS

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For more than 30 years the world's leading companies have trusted Green Hills Software's secure and reliable high performance software for safety-critical applications.

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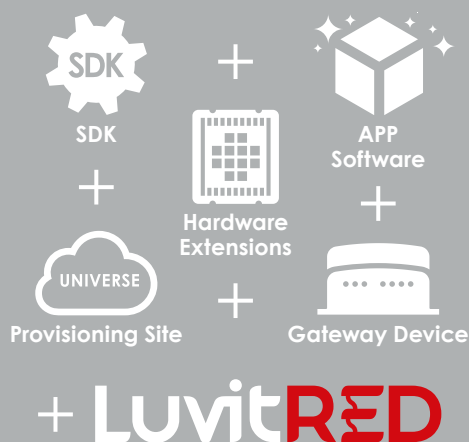
CloudGate

Smart wireless **M2M SOLUTIONS**



Ideal for Transports & Logistics, Industrial & Remote Asset Monitoring, Smart Cities & Environmental Monitoring

CloudGate is the carrier-approved M2M solution platform that delivers **device connectivity, security and processing power for global M2M applications**. Option Wireless Technology's CloudGate Smart Wireless M2M Solutions include the carrier-approved intelligent Cloudgate gateway that provides device connectivity and processing power for M2M applications. Designed for quick and cost-effective deployment, each gateway device comes with CloudGate Universe, Option's cloud-based configuration and deployment platform, as well as the CloudGate SDK for rapid application development, the CloudGate HDK for prototyping custom expansion cards and LuvitRed, a visually configurable device agent with an easy-to-use graphical, "drag and drop & visual wiring " configuration environment for CloudGate gateway devices . A pre-built library of software applications and a selection of modular hardware extensions means that CloudGate solutions deliver ease of deployment and maximum flexibility. **Only Option Wireless Technology delivers a complete M2M ecosystem.**





PRODUCTS and SPECIALISTS

© 2015 Qamcom Research & Technology

- Founded in 2001. Offices in Gothenburg and Stockholm.
- DNA from STEM (Science, Technology, Engineering and Mathematics)
- Business model driven R&D company
- Focusing on Next Generation Networks and Autonomous Drive
- Active in the areas of
 - Communication, Radar and Automotive systems
 - RF and Signal processing
- Services ranging from full OEM product development to specialist at hourly rate
- 32 out of 86 employees have PhD degree

QR77s

77 GHz Short Range Radar
(Obstacle Detector System)

Complete System Available, Q2-16



Contact: Stockholm, Ann-Louise Johansson 070-226 07 74, Gothenburg, Magnus Kilian 070-300 50 15

STM32L4 Series

Ultra-low-power and performance



STM32® ultra-low-power at 100 DMIPS with DSP and FPU

ULTRA-LOW-POWER EXCELLENCE

The STM32L4 microcontroller is based on a new ultra-low-power platform featuring FlexPowerControl which extends flexibility to reach optimized power consumptions: With an EEMBC ULPBench score of 153 ULPBench™-CP, the STM32L4 outperforms the market in the ultra-low-power domain.

WITH PERFORMANCE

Offering up to 1 Mbyte of Flash (dual bank) memory and 128 Kbytes of SRAM, the STM32L4 unleashes the ARM® Cortex®-M4 power efficiency with floating point unit (FPU) and DSP instructions. It delivers 100 DMIPS / 273 CoreMark thanks to the ST ART Accelerator™ at 80 MHz. The entire system performance is optimized using a multi-AHB bus matrix and DMA controllers.

OUTSTANDING LOW-POWER MODES

Wake-up time	Mode	Consumption
250 µs	VBAT	4 nA / 300 nA*
14 µs	SHUTDOWN	30 nA / 330 nA*
14 µs	STANDBY	130 nA / 430 nA*
14 µs	STANDBY+ 32 Kbytes RAM	360 nA / 660 nA*
5 µs	STOP 2 full retention	1.1 µA / 1.4 µA*
6 cycles	SLEEP	35 µA / MHz
	RUN	100 µA / MHz

* without RTC / with RTC



Corporate Overview

Vector Software is the world’s leading provider of software testing solutions for embedded applications. Companies worldwide rely on Vector Software’s VectorCAST™ test automation platform to reduce the development time, risk, and cost of delivering reliable, secure, and compliant software.

Customers

Companies around the world trust VectorCAST as their embedded software testing platform. Our customers include...

Aerospace | Defense

Airbus
Bell Helicopter
Boeing
EADS
General Atomics
General Dynamics
Honeywell
Lockheed Martin
Thales

Automotive

Autoliv
Beko
Bosch
Delfi
Fujitsu
Hyundai
Magna Powertrain
SsangYong Motor
Visteon

Industrial | Energy

Analog Devices
Bechtel
British Energy
Caterpillar
Endress+Hauser
Ingersoll Rand
Invensys

Railway

ABB
Alstom
Bombardier
Schneider Electric
Siemens
ŠKODA Transportation
TRW
Union Switch & Signal

Medical Devices

Abbott
Baxter
Boston Scientific
Covidien
Medtronic
Philips
Sirona Dental
Terumo

Business-Critical

ACI
Arçelik
Analog Devices
Capgemini
Helbling Technik

Fast Facts

- Founded in 1989 by embedded software engineers
- First product released for Lockheed Martin’s C-130J Super Hercules
- Corporate HQ – Providence, EMEA HQ – London, APAC HQ – Shanghai
- Worldwide Presales, Sales, and Technical Support
- Development in United States, United Kingdom, and India
- 25+ years of embedded software expertise in rigorous, highly regulated industries
- 90+ Employees, 100+ Partners, 900+ Customers

Competitive Advantages

At Vector Software, embedded software testing is our passion. We have been developing software test automation and efficiency solutions since our founding. Our competitive advantages and core competencies include:

- 10+ years delivering solutions for Continuous Integration and Agile processes
- Automated solutions that immediately support DevOps groups and IoT applications
- Proven solutions for addressing Technical Debt
- 100% focused on Dynamic Testing
- Partnerships with leading technology companies to offer comprehensive solutions
- Global customer support, educational, and professional services

Core Capabilities

The VectorCAST test automation platform reduces testing challenges placed on individual developers by automating and standardizing application component level testing. Vector Software offers solutions for:

- Unit Testing
- Integration Testing
- System Test
- Code Coverage
- Regression Test Management
- Requirements Traceability
- Target Test Execution
- Coding Standards Enforcement
- Quality Analysis and Reporting
- Agile Test Driven Development (TDD)
- Continuous Integration
- Change Based Testing
- Compliance and Validation

Partnerships

Vector Software’s strategic partnerships help provide customers with innovative, flexible tool environments that make testing easier and more efficient. We partner with industry-leading technology companies to offer high value integrations that drive productivity. With VectorCAST, software issues can be resolved faster and at a lower cost, with the benefit of providing a preferred workflow to engineers.



KONFERENSERBJUDANDE

Embedded Linux Grundkurs

Innehåll:

- Introduction
- Linux system overview
- Kernel subsystems
- Tools
- Building and booting the kernel
- Root filesystem and user space initialization
- Kernel modules and device drivers
- Linux and realtime

Teori varvas med praktiska övningar.

3 dagar, 2015-12-07 - 09, Solna Strand

Kontakta oss för en detaljerad kursbeskrivning!

Konferenspris: 16500 kr

Boka senast 2015-11-20.

Ange "ECS2015" vid bokningen.

Vi är

Specialister inom

- Open source
- Embedded Linux
- Realtime

Vi har

Färdiga lösningar, konsulttjänster och utbildningar fokuserade på utveckling av inbyggda system. Våra mycket erfarna medarbetare har levererat kurser och tjänster i området i 15 år och vi har därför den längsta erfarenheten av Linux-utbildningar för embedded i Sverige.

Våra lösningar

Baseras normalt på tillgängliga open sourcepaket men vårt fokus är alltid att i första hand lösa kundens problem. Våra specialistområden sträcker sig från lägsta nivåns BSP-utveckling, troubleshooting, byggmiljöer, realtidsanalys och realtidsanpassningar, till licenshantering och långsiktigt underhåll av open source-baserade system.

Våra kunder

Återfinns i alla branscher som medtech, fordon, automation, konsumentelektronik mm



Retotech AB
info@retotech.se
0705 23 24 00



NOVEMBER 3 – For detailed program, go to www.embeddedconference.se

09:15-10:15

Track 1 – Room M6	Track 2 – Room M5	Track 3 – Open Stage	Track 4 – Room M1	Track 5 – Room M3	Track 6 – Room M4
STEW Program on page 17	Software Development Methods 09:15 Reduce Coding Errors using Production Code Generation with Model-Based Design Presenter: Fredrik Häbring; MathWork 09:45 AUTO-CAAS: Model-Based Fault Prediction and Diagnosis of Automotive Software Presenter: Wojciech Mostowski; Halmstad University	Operating Systems 09:15 Windows 10 vs. Linux for IoT Devices Presenter: Christian Eder; congatec 09:45 Microsoft Win 10 IoT and Development Tool Presenter: Tim Jensen; Avnet Embedded	IoT Development 09:15 Industry 4.0 – Politics or Technology? Presenter: Andreas Rosengren; Prevas 09:45 Research and Application Trends in Machine-to-Machine Communications Presenter: James Gross; KTH	Workshop 1 Linear Technology 09:15 Power design in practice, a lab session Presenter: Thomas Ginell and Mats Hellberg; Linear Technology Corporation <i>Hands-on session Limited seating.</i>	Workshop 2 Acal Bfi 09:15 From Idea to the Field: Industrial Open Hardware for IoT running Open Source software Presenters: Kristoffer Martinsson; Acal Bfi Nordic Hans Andersson; Acal Bfi Nordic Thibault Cantegrel; Sierra Wireless <i>Hands-on session. Limited seating.</i>

10:15-11:00 COFFEE

11:00-12:00

STEW <i>Continued</i> 11:00 Working agile but also in a traditional way! Building bridges without loss of information Presenter: Daniel Morris; Polarion Software 11:30 Agile development – Feature stories with TDD for embedded systems Presenter: Peter Risberg; Tritech	Software Development Methods <i>Continued</i> 11:00 Working agile but also in a traditional way! Building bridges without loss of information Presenter: Daniel Morris; Polarion Software 11:30 Agile development – Feature stories with TDD for embedded systems Presenter: Peter Risberg; Tritech	Operating Systems <i>Continued</i> 11:00 How to Measure RTOS Performance Presenter: Colin Walls; Mentor Graphics 11:30 Benefits of Virtualization in Embedded Systems Presenter: Alexander Smirnov; ilbers GmbH	IoT Development <i>Continued</i> 11:00 Scalable IoT Simulation for Software and System Testing Presenter: Jakob Engblom; Wind River, 11:30 Processing at the edge: Why is a Reconfigurable Input/Output architecture ideal for the IoT? Presenter: Jimmie Adolph; National Instruments	Workshop 1 <i>Continued</i>	Workshop 2 <i>Continued</i>
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12:00 INAUGURATION OF ECS 2015 WITH DR SARA MAZUR, HEAD OF RESEARCH, ERICSSON – OPEN STAGE

12:00-13:20 LUNCH AND EXHIBITION

13:20-13:50 KEYNOTE PRESENTATION – ROOM M1

The road towards autonomous transport solutions
 Presenter: Daniel Frylmark; Scania CV AB, Head of Driver Assistance Controls

14:00-15:00

STEW <i>Continued</i> 14:00 Joint Analytical and Simulation-Based Design Space Exploration for Mixed-Criticality System Presenter: Ingo Sander; KTH 14:30 Continuous Delivery of Embedded Systems Presenter: Mike Long; Praagma	Software Development Tools <i>Continued</i> 14:00 Joint Analytical and Simulation-Based Design Space Exploration for Mixed-Criticality System Presenter: Ingo Sander; KTH 14:30 Continuous Delivery of Embedded Systems Presenter: Mike Long; Praagma	Small Formfactor Boards 14:00 The Future of Computer-On-Modules Presenter: Christian Eder; congatec 14:30 Make and buy - system design with COTS-platforms Presenter: Patrik Björklund; Tritech Solutions AB	IoT In Practice 14:00 Multidimensional Hierarchical Graph Neurons (mHGN) for Real-time and Detailed (in-depth) Weather Forecast utilizing Server-less Real-time Communities Communication (SRCC) of mobile phones Presenter: Benny B. Nasution; State Polytechnic of Medan, Indonesia 14:30 Make IoT Happen - experiences from implementing IoT from chip to apps! Presenter: Joakim Eriksson, SICS Swedish ICT AB / Yanzi Networks	Workshop 3 Nohau 14:00 Get started with debug and trace ARM 9/Linux Target Presenter: Björn Skånberg, Nohau Solutions AB <i>Hands-on session Limited seating.</i>	Workshop 4 Quiviq 14:00 Automatic Test Case Generation Presenter: Hans Svensson; Quiviq <i>Hands-on session Limited seating.</i>
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15:00-15:30 COFFEE

15:30-17:00

STEW <i>Continued</i> 15:30 Dynamic Memory Allocation & Fragmentation in C & C++ Presenter: Colin Walls; Mentor Graphics 16:00 Writing Secure and Reliable C/C++ Code Presenter: Marcus Nissemark; Green Hills Software 16:30 The inefficiency of C++, fact or fiction? Presenter: Andreas Wallberg; IAR Systems	Software Development Tools <i>Continued</i> 15:30 Dynamic Memory Allocation & Fragmentation in C & C++ Presenter: Colin Walls; Mentor Graphics 16:00 Writing Secure and Reliable C/C++ Code Presenter: Marcus Nissemark; Green Hills Software 16:30 The inefficiency of C++, fact or fiction? Presenter: Andreas Wallberg; IAR Systems	FPGA 15:30 FPGA and SoC Design from Idea to Implementation Presenter: Jonas Rutström; MathWorks 16:00 The new Software Define "everything" tools for FPGAs will provide familiar CPU-, GPU- and ASSP-like programming environments to system and software engineers Presenter: Tryggve Mathiesen; Qamcom 16:30 OpenCL in an Embedded Environment Presenter: Johan Karlsson; Xelmo	IoT Security 15:30 Component Trust - A Corner Stone for Safety in IoT Presenter: Johan Thulin; Combitech 16:00 Bringing military grade security to the Industrial Internet of Things Presenter: Mark Pitchford; Lynx Software Technologies 16:30 Security by Separation; Reliable security for IoT devices Presenter: Mehmet Özer, Sysgo	Workshop 3 <i>Continued</i>	Workshop 4 <i>Continued</i>
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17:00-18:00 INDUSTRY RECEPTION

18:00 The Embedded Dinner Party – 10th anniversary edition! (Ticket holders only)



NOVEMBER 4 – For detailed program, go to www.embeddedconference.se

09:15-10:00

Track 1 – Room M6	Track 2 – Room M5	Track 3 – Open Stage	Track 4 – Room M1	Track 5 – Room M3	Track 6 – Room M4
ARROWHEAD Program on page 17	Software Quality 09:15 Code coverage for embedded targets and tool qualification Presenter: Olivier Casse; Verifysoft 09:45 Coding Standards – “everything has its place” Presenter: Dr Frank van den Beuken; PRQA	Low Power Design 09:15 Low-Power MCU in-design made easy Presenter: Bertrand Denis; STMicroelectronics 09:45 High performance power design using efficient tools Presenter: Thomas Ginell; Linear Technology Corporation	IoT Tutorial 09:15 How to secure the Industrial Internet of Things Presenter: by Alan Grau; Icon Labs	Workshop 5 KTH, ICES, and CP-SETIS 09:15 Linked-Data and OSLC for Tool Interoperability – A hands-on tutorial Workshop leaders: Jad El-Khoury, researcher at KTH, and Frederic Loiret, researcher at KTH and at OFFIS <i>Full Day Workshop</i> <i>Hands-on session, Limited seating</i>	Workshop 6 Repeat session Nohau 09:15 Get started with debug and trace ARM 9/Linux Target Presenter: Björn Skånberg, Nohau Solutions AB <i>Hands-on session, Limited seating</i>

10:15-11:00 COFFEE

11:00-12:00

ARROWHEAD <i>Continued</i>	Software Quality <i>Continued</i> 11:00 Test Driven Development (TDD) in an Agile-programming environment Presenter: Jason Masters; Vector Software 11:30 5 ways to protect your software supply chain from hacks, quacks, and wrecks Presenter: Steve Howard; Rogue Wave Software	Debug 11:00 Debugging beyond printf Presenter: Martin Gisbert; IAR Systems 11:30 Runtime visualization on ARM Cortex-M devices Presenter: Dr. Johan Kraft; Percepio AB	IoT Robust Networks 11:00 Data Quality in Internet of Things Presenter: Per Olof Hedekvist, SP 11:30 IoT that really matter Presenter: Mats Andersson; ublox	Workshop 5 <i>Continued</i> 11:00	Workshop 6 <i>Continued</i> 11:00
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12:10-13:20 LUNCH AND EXHIBITION

13:20-13:50 KEYNOTE PRESENTATION – ROOM M1

The Internet of Things: Why is the promise taking so long to fulfil?

Professor William Webb; CEO Weightless SIG and President IET

14:00-15:00

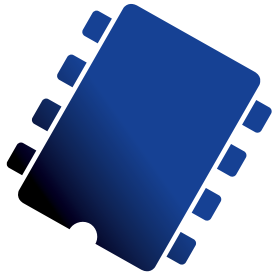
ARROWHEAD <i>Continued</i>	Open Source 14:00 Realising Efficient Industrial Linux Development Presenter: Kim Højgaard-Hansen; Prevas 14:30 Automotive Grade Android Driving Vehicle Connectivity Presenter: Björn Rudin; Combitech	HTML5 Tutorial 14:00 HTML5 - a Real Option for Embedded Software User Experience Presenter: Joakim Hedenstedt and Tommi Leino; Movial	IoT Sensors/ Networks 14:00 Technologies for Securing an NFV or IoT System in Embedded Linux Presenter: Iisko Lappalainen; MontaVista Software 14:30 ARM mbed for Things of Internet – Boosting the Internet and the Things Presenter: Jaakko Ala-Paavola; Espotel Neil Jackson; ARM	Workshop 5 <i>Continued</i> KTH, ICES, and CP-SETIS Attendees will develop OSLC-compliant tool adaptors, based on the OSLC4J <i>Hands-on session</i> <i>Limited seating</i>	“Smartare Elektroniksystem” 14:00 Multimillion program for electronics Learn more about this national multimillion program - how to get involved and participate Presenter: Magnus Svensson, Program Manager, Smartare Elektroniksystem 14:30 Nyfiken på Branschorganisationen Svensk Elektronik? Svensk Elektronik hjälper dig. På 30 min berättar vi hur. Presentatörer: Maria Månsson, ordförande, Lena Norder, vd, Branschorganisationen Svensk Elektronik <i>(In Swedish)</i>
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15:00-15:30 COFFEE

15:30-17:00

ARROWHEAD <i>Continued</i>	Open Source <i>Continued</i> 15:30 The future of embedded networking nodes - an open approach to Network Function Virtualization Presenter: Daniel Forsgren; Enea 16:00 Axiom 4K open filmmaking camera - a success story of collaboration around open source Presenter: Michael Gielda; Antmicro 16:30 Tips and tricks for making the MinnowBoard an outstanding Embedded Platform Presenter: Berth-Olof Bergman; WinZent Technologies		IoT Sensors/ Networks <i>Continued</i> 15:30 Edge to Enterprise – without the wires Presenter: Alastair Worth; Avnet Embedded 16:00 Testing and Tuning your Appcessories Presenter: Tom O Raghallaigh; Frontline 16:30 Bluetooth Low Energy Programming and the standard API Presenter: Lars Hamren; Svensk Datorutveckling	Workshop 5 <i>Continued</i>	
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17:00 END



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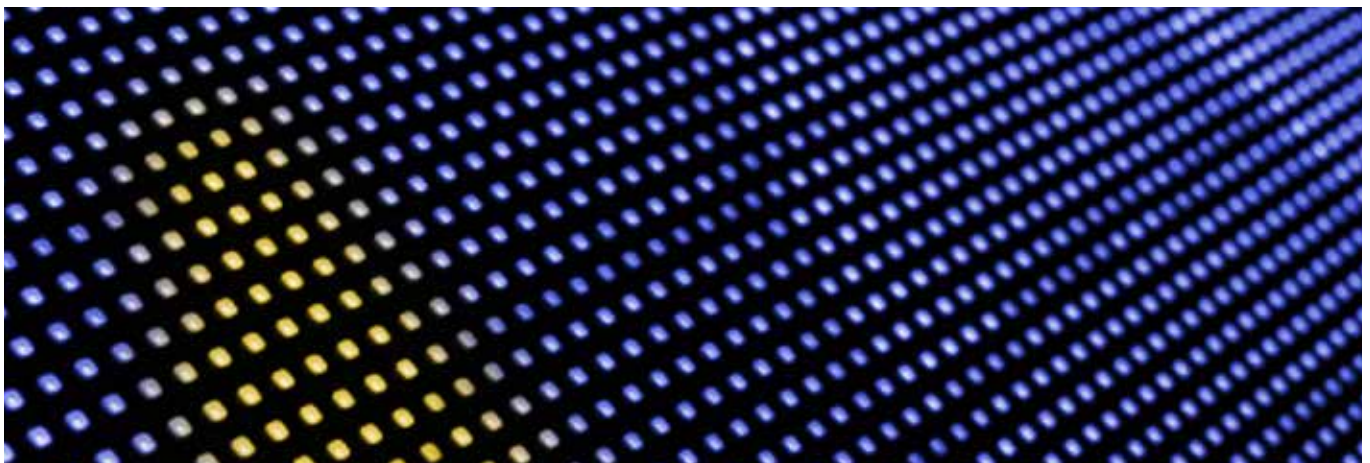
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SWEDSOFT STEW – NOVEMBER 3

Time	Activity
9:15	Swedsoft – introduction and information
09:35	Visual GUI Testning – A new technology for a new SW Industry Presenter: Emil Alégroth, Chalmers University of Technology
10:15	COFFEE
11:00	Open Innovation through the Lens of Open Source Tools Presenter: Hussan Munir / Johan Linåker, Lund University
11:30	Value - Engineering it! Presenter: Kris Wnuk, Blekinge Institute of Technology
12:00	INAUGURATION AND LUNCH
13:20	KEYNOTE
14:00	Emergent Configurations of Connected Systems Presenter: Romina Spalazzese, Malmö University
14:30	New Foundations for Next Generation Modeling Languages and Tools Presenter: Walid Taha , Halmstad University
15:00	COFFEE
15:30	Papyrus-RT and SMARTCore: a joint effort for boosting the benefits of Model-Driven Engineering in industry Presenter: Federico Cicozzi, Mälardalen University
16:00-17:00	Swedsoft Members Meeting
17:00	ECS INDUSTRY RECEPTION
18:00	THE EMBEDDED DINNER PARTY – Note: Separate registration necessary. Tickets are SEK 595 plus VAT.

ARROWHEAD – NOVEMBER 4

Time	Activity
9:15	Arrowhead Framework: concepts and basic architecture Presenter: Prof. Jerker Delsing; Lulea University of Technology
09:35	Core services enabling local and global IoT clouds Presenter: Pal Varga; AITIA International Inc
09:55	Core services supporting smooth application creation Presenter: Per Olofsson, BnearIT AB
10:15	COFFEE
11:00	Arrowhead documentation system Presenter: Prof. Luis Lino Ferreira; Polytechnic Institute of Porto
11:20	SOA protocol transparency technology Presenters: Iker Martinez De Soria Sanchez; TECNALIA and Hasan Derhamy; Lulea University of Technology
11:40	Test tools ensuring application functionality and compliancy Presenter: Fredrik Blomstedt, BnearIT AB
12:00	LUNCH
13:20-13:50	KEYNOTE
14:00	Common architecture and services for energy cost optimization in multiple domains: manufacturing, lift/hoisting, and water distribution Presenters: Chloé Desdouits and Claude Le Pape; Schneider Electric
14:20	End to end security automotive test applications Presenters: Andreas Aldrian; AVL and Thomas Rupprechter; Infineon Technologies Austria AG
14:40	Automating the process of creating Arrowhead and IEC61850 compliant Adapters Presenter: Aitor Urbieto; IK4-IKERLAN
15:00	COFFEE
15:30	Arrowhead communication framework in electromobility domain Presenters: Michele Ornato; CRF and Federico Montori; University of Bologna
15:50	Dynamic operation and maintenance system Presenter: Mika Karaila; Valmet Automation
16:10	Integration of energy usage and energy production to an virtual market of energy Presenters: Arne Skou; Aalborg University and Per D Pedersen; Neogrid
17:00-	END

EXHIBITOR LIST

AAEON Europe	38	Halmstad University / CERES	18	Realtime Embedded	56
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Freescale Semiconductor	73	Umeå universitet	21	ÅF Technology	85
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Green Hills Software	61	Qamcom	64		

*Arrowhead – represented companies:

Aalborg University
ACCIONA Infraestructuras
Aktiebolaget Elektronik-
Konstruktion Innovation (Abelko)
AVL List GmbH

BITRON SPA

BnearIT AB
CRF
EUROTECH SPA
Fagor Electrónica S. Coop.
Ford Motor Company

Fully Distributed Systems Ltd

High Speed Sustainable
Manufacturing Institute
Honeywell spol s.r.o.
Ikerlan S. Coop
INDRA Sistemas S.A.

Infineon Technologies Austria

Instituto Superior de Engenharia
do Porto (ISEP)
Luleå University of Techn.
Lyse Energi A/S
Midroc Electro AB

Mondragon University

NODA Intelligent Systems AB
PS-Tech B.V.
Schneider Electric industries SAS
SINTEF
SKF

Tampere University of Techn.

Teknologian tutkimuskeskus VTT
THT Control OY
University of Bologna
Wapice

SWEDISH EMBEDDED AWARD 2015 – NOMINEES:

ENTERPRISE CATEGORY

Aifloo Smart Care, Aifloo AB	1
Charge Portal, Chargestorm AB	2
De-Iceman, WFE Systems AB	3
Serstech 100 Indicator, Serstech AB	4
Optical Sensors for Health & Social Care, Ruffcom AB	5
Zipwake, Zipwake AB, development partner Trittech AB	6
Tingco Box, Info24 AB	7

STUDENT CATEGORY

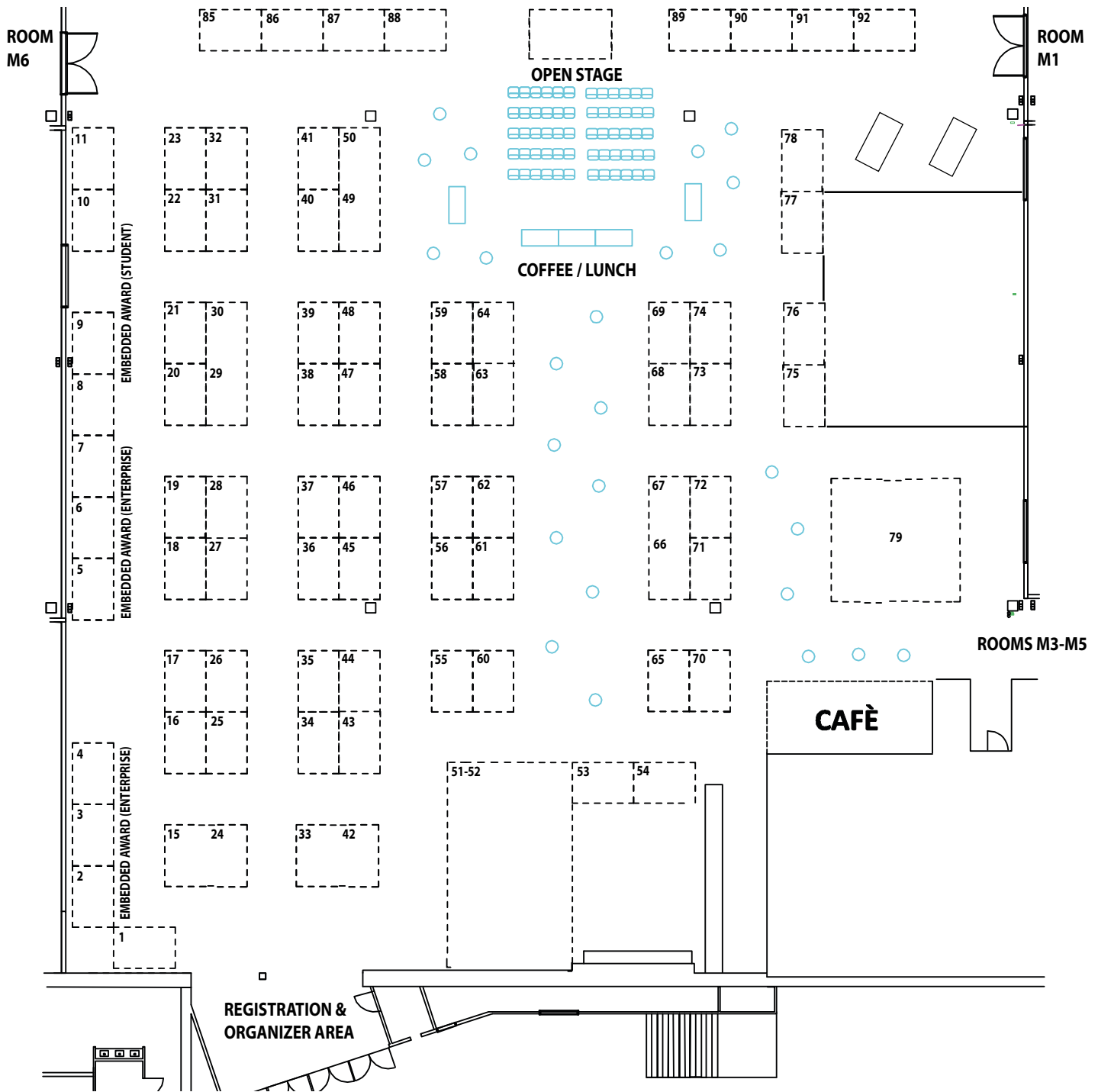
Modern workout machine, Högsolan i Halmstad	8
Portiér, Högsolan i Halmstad	9
Walnut Waves, Högsolan i Halmstad	10

Exhibitor list as per October 26, 2015. The list may be subject to change. We accept no responsibility for possible changes or printing errors. The organizers have reserved the right to abbreviate company names when deemed necessary.

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INFORMATION

DATE November 3-4, 2015

VENUE Kistamässan, Stockholm, Sweden

ABOUT THE CONFERENCE All sessions are free of charge, but pre-registration on www.embeddedconference.se is mandatory. Please register and print out your badge in advance to save time onsite. Coffee and light lunch is free of charge to all visitors. The conference language is English. Please check signage onsite for the location of the different sessions.

ABOUT THE EXHIBITION Around 90 exhibitors from the embedded industry will showcase the latest news and products. They include top international suppliers, universities and the nominated companies and students of the Swedish Embedded Award. The exhibition is free of charge and no further registration than to the conference sessions is needed (please see above).

STEW – Software Technology Exchange Workshop – The fourth edition of STEW, organized by Swedsoft, will be held in parallel with ECS on November 3. For further information please visit www.swedsoft.se

ARROWHEAD – The Arrowhead track will be presented on November 4. For further information please visit www.arrowhead.eu

EXHIBITION OPENING TIMES

Tuesday, November 3:	09:00-17:00
Industry Reception:	17:00-18:00
Embedded Dinner Party:	18:00-22:00 (SEK 595 plus VAT)
Wednesday, November 4:	09:00-16:00

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