

# Nordic IoT News

## No. 1-2018

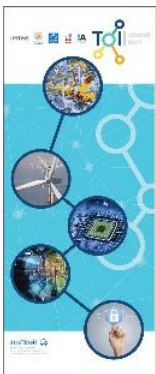
### New PhD students associated with the Hub

Five new PhD students have been associated with our Hub. Please welcome:

- Eder Ollora Zaballa, DTU: Next generation SDN/NFV-based Management of Service
- Nils Vretman, LTH: Security for embedded real-time systems
- Albin Heimerson, LTH: Machine Learning for Autonomous Data Centers
- Bekkouche Oussama, Aalto: 5G-based steering of Unmanned Aerial Vehicles
- Hellaoui Hamed, Aalto: Mobile Network enabled UAVs for the delivery of IoT services

In total we now have 33 PhD students affiliated to the Hub meaning that their Hub activities are eligible for funding. Please visit <http://www.nordic-iot.org/doctoral-school/list-of-affiliated-phds/> for a complete list of students.

### Hub Roll-up distributed to the partners



A Roll-up poster (nearly 1 x 2 m) has been produced and mailed to all eight Hub partners. Please use it for display at your department or (if possible) bring it to local arrangements to promote our Hub network.

Please also notice that we have a shared Google Drive folder where you can find dissemination information, logo, templates, etc.

<https://drive.google.com/drive/folders/0ACsY5Df2Po6dUk9PVA>

### IoT Hub session at the Nordic Test Forum

During the Nordic Test Forum annual meeting on 27-28 November in Snekersten (DK) our Hub has been invited to give a workshop on Industrial IoT. Erik Larsson, LTH has drafted an interesting programme with the below partner inputs:

- Opening, Erik Larsson, Lund University
- Secure Industrial IoT, Christian Gehrman, Lund University



- Safe and secure wireless communication for cooperative systems, Stig Petersen, Sintef, Norway
- Reliability in Resource-Constrained Wireless Networks with IEEE 802.15.4 TSCH, Xenofon Fafoutis, Technical University of Denmark
- Fault-tolerant topology and routing synthesis for IEEE time-sensitive networking, Bahram Zarrin, Technical University of Denmark
- Fault management; chip to system, Erik Larsson, Lund University
- Panel: How to secure supply-chains of PCB manufacturing

Please visit <http://www.nordicestforum.org/> for more information.

## International IIoT Conference organized during the [High Tech Summit](#) on 10-11 October at DTU

During the Hub life time we have a Deliverable, D4, where we will provide six international conferences (M7, M19, M30, M43, M55 and M66). The first international conference took place on 11 October with approximately 120 attendees. The technical programme is shown below:

### *Internet of Things: Fog Computing and the Internet of Things*

Session chair: Ivan Ring Nielsen, Director, Nordic University Hub on Industrial IoT, DTU Compute

Fog Computing, also sometimes called Edge Computing, brings the Cloud “closer to the ground”, to the edge of the network, where the “things” are located. The talks will present the new paradigm of Fog/Edge Computing and its role in the IoT. We’ll hear about IoT use cases, what are the challenges when prototyping IoT devices and how the Fog can secure the IoT.

- |       |  |
|-------|--|
| 10.00 | Edge Computing and IoT<br>Johan Eker, Principal Researcher, adj. Professor, Ericsson   |
| 10.25 | Towards Mission-Critical Control at the Edge and Over 5G<br>Karl-Erik Årzén, Lund University   |
| 10.50 | The AntibloTic Comes with the Fog – Protecting IoT Devices Against DDoS Attacks with Fog Computing<br>Nicola Dragoni, Associate Professor, DTU Compute |
| 11.10 | Remote Container Management platform for refrigerated container<br>Marius Waldum, Product Owner and Søren Vedel, Data Scientist, Maersk                |
| 11.30 | The pitfalls of the second prototype and how to avoid them<br>Henrik Ehlert, Tech Architect, inQvation and Henrik Bo Hansen, CTO, inQvation            |
| 12.00 | Lunch  |

Slides will be made available in the shared Hub Google Drive.

### *Internet of Things: IoT technologies and Security (Cloud to Edge)*

Session chair: Martin Nordal Petersen, Ass. Professor, Nordic University Hub on Industrial IoT, DTU Fotonik.



This track had presentations from IoT infrastructure providers, including open-spectrum technologies like SigFox and LoraWAN as well as the licensed NB-IoT. This also includes applied use-cases and security issues related to these technologies.

- 13.50 The wireless infrastructure of the future for logistics and vessels monitoring  
Søren Manicus, Teracom/Indesmatech A/S
- 14.10 IoT platform - the value of data  
Kristian Krautwald, IoT Denmark
- 14.30 NB-IoT - The future of cellular IoT  
Søren Madsen, TDC
- 14.50 Artificial Intelligence 2.0 – The rat traps of the future are poison-less and intelligent  
Rune Barslund, Arctic Systems
- 15.10 Security and robustness in IoT technologies, a comparison (SigFox, LoraWAN, NB-IoT)  
Florian Coman, DTU Fotonik
- 15.30 How modern IoT solutions as Smart products can utilize Cloud and Edge technologies  
Kim Nicolaisen, CGI
- 16.00 IoT Poster session
- 17.00 Finish

## **New Working Group Leaders appointed during the last Telco on 4 October**

During the recent Telco it was agreed to re-nominate the WG leaders with the following duties:

WG1 Coordination and project Management: DTU

WG2 Training: KTH/LTH

WG3 Infrastructure and industrial cooperation AALTO

WG4 Research and Dissemination NTNU

WG5 Fund raising DTU

As part of the Telco it was decided that WG2 initiates a survey on available PhD courses and desired PhD courses among the partners. The survey will be used to identify the gap, i.e. missing course topics.

Next Management Telco, with a focus on Fund raising, will take place on 1 November at 14.00 CET.

## **Upcoming event on 5-6 November at KTH: OSLC and Linked Data Unconference**

The first conference on OSLC & LinkedData (OSLCFest) will take place in Stockholm on November 5th & 6th, 2018 at the KTH Royal Institute of Technology. OSLCFest will showcase the latest in technology to connect data across silos using standard APIs. The event will bring together experts in ALM/PLM/MBSE with experts in APIs, Linked Data, graph databases, and query languages.

## **Next Yearly Meeting**

Notice that the next Yearly Meeting will take place on 25-26 April, 2019 at AALTO University.

