Euro-CASE Annual Conference 2016

Midday Session:
Industrial Internet of Things

Hosts	ATV – Danish Academy of Technical Sciences
	DTU – Technical University of Denmark
Date	Monday 14 November 2016
Venue	**Meeting Room 1, first floor, DTU**

The 4.th industrial revolution – taking part or missing out?

Internet of Things and Big Data are two of the cornerstones in the Fourth Industrial Revolution that gains speed right now. All over the world, Industrial leaders are considering how they may transform or reconfigure their businesses. They struggle with questions such as: How can we integrate sensors and interconnected devices
in our products or manufacturing processes? What kind of data can we generate? What can we learn from this data? Where are the new business models – for us and for our competitors? How do we handle cyber threats and security issues? Which competencies should be involved in the decision process? How should the transformation process be organized?

This session will provide an insight into current state of the art in the field of Internet of Things and exploitation of Big Data. The session will also provide examples of firms that have successfully managed to exploit data and information from smart devises embedded in their products. Furthermore, it will present examples of firms that are currently struggling with choosing the right strategy. Finally, the session will offer a platform for debate and interaction amongst participants.

About the speakers:

Professor **Kaj Grønbæk** holds a Ph.D. in computer science, Aarhus University, and has for many years worked in close cooperation with industry on web technologies, ubiquitous computing, positioning, mobile computing, and user interfaces. Since 2009, Kaj is Lab manager (part time) at the Alexandra Institute A/S. Furthermore, Kaj is involved in the Manufactoring Academy of Denmark (MADE) SPIR project.

Chief Engineer and Professor **Carsten Skovmose Kallesøe** holds an industrial Ph.D. from Grundfos and Aalborg University. Since then, he has worked more than 10 years with development of new products and services with Grundfos. Since 2014, he works as part time industrial professor with Aalborg University.

CTO **Jesper Mogensen** is educated with Aalborg University and holds a MBA in Technology Management. Since 2014 he has the position as CTO of SKOVA/S. Jesper has worked in close cooperation with research institutes and universities and is responsible for industrial Ph.D. student programs at SKOV.

CEO and founder **Bo Eskerod Madsen** holds a Ph.D. in statistical bioinformatics from Aarhus University and has worked with BigData analysis from monitoring systems in AgroTech before he founded ReMoni in 2013.

Senior consultant **Tom Togsverd** holds a Ph.D. in Operations Research, DTU Compute, and has worked in the Danish Ministry of Finance and in the telecom industry. In 1999, he founded the Danish Association for ICT & Electronics in the Confederation of Danish Industries. He is now part time working for ATV.

13:50	**Welcome**
	Moderator Tom Togsverd

13:55	**Setting the scene: IoT and Big Data - Challenges and Potentials for Industry**
	Kaj Grønbæk, Professor, Dept. of Computer Science, Aarhus University

The presentation will give an overview of the key challenges and potentials that the new disruptive technologies provide for many industries. The talk will focus on the digitalization of industry through product innovation and service design utilizing the digital technologies. Examples from the international scene as well as the Danish MADE project will be given.

14:25	**Grundfos Holding A/S – smart pumps and new services**
	Carsten Skovmose Kallesøe, Chief Engineer and Industry prof., Aalborg University

Grundfos is one of the leading manufacturers of pumps and pump systems and produces pumps for a variety applications. Grundfos has from the last century been a pioneer in installing sensors and electronics in their products. Today Grundfos offers smart solutions on top of most of their pumps that enable better operation and service. As such, remote pump control and optimization based on embedded systems and services are an increasing part of Grundfos' offerings.

14:45	**SKOV A/S – from component sale to business model based on big data analytics**
	Jesper Mogensen, CTO, SKOV A/S

SKOV deliver climate and farm management solutions for poultry and pig farms all over the world. SKOV provides smart systems for cooling, heating and ventilation with online connections, which makes it possible to optimize energy consumption, including light usage, and welfare for the animals. Last step has been to use big data from farm surveillance for new services to the customers.

15:05	**ReMoni A/S – cloud services for smart metering**
	Bo Eskerod Madsen, CEO and founder

ReMonis has developed an IoT solution for low cost surveillance of technical installations in buildings, down to the single critical devices, to reduce loss of resources. Metering data are collected in the cloud and used for automatic fault detection, and plug-in to a broad variety of services.

15:25	**Panel debate – how can we accelerate the usage of IIoT?**
	Carsten Skovmose Callesøe, Grundfos A/S
	Jesper Mogensen, SKOV A/S
	Bo Eskerod Madsen, ReMoni A/S
	Tom Togsverd (Moderator)

15:50	**Summing up**
	Tom Togsverd

16:00	**Return to main hall "Glassalen" on ground floor**