Nordic IoT News
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Yearly Hub meeting on 25-26 April in Helsinki

The Yearly Hub meeting took place at Aalto University, Thursday to Friday, 25-26 April 2019. It was attended by 37 Hub members. The programme was organized in both plenary sessions and parallel sessions. The parallel sessions were used to address issues specifically related to the management of the Hub and at the same time the PhD students could focus on progress and collaboration opportunities related to their thesis work.

A major outcome of the meeting was an initiative to motivate non-senior staff to put forward joint Hub activities – please see the end of this newsletter.

A full report from the Yearly meeting is available on the Hub Google drive.

Feedback from the Yearly meeting - Questionnaire

During the yearly meeting a questionnaire was handed out to all the participants in order to receive feed-back on the meeting set-up.

The general free-text feedback gave a rather clear picture of the student's preferences. The two poster sessions with posters related to Cloud computing (chaired by Michele De Donno, DTU) and Fog/Edge computing (chaired by Jussi Hanhirova, Aalto) were highly appreciated by the students. As an outcome of these sessions a number of students arranged to meet with their fellow colleagues to discuss and share their thesis experiences. Thus, eight mobility arrangements were agreed meaning that students from one Hub partner will be visiting students affiliated to another university to look for synergies with respect to e.g. test cases, benchmarks and data sets.

Another question surveyed during the meeting was how well the students feel integrated with the Hub activities. The general feed-back was that the Yearly meeting significantly improves the students' knowledge of hub related services and they look forward to coming arrangements. Finally, the students appreciated the networking during the poster sessions.

The full questionnaire analysis is available on the Hub Google drive.

Video conferencing system to be introduced at the Hub sites

During the Yearly meeting it as agreed to investigate the possibility of sharing lectures across the Hub partners. Lund University has already had good experience with tools for sharing of lectures. Therefore, it was agreed that all Hub partners acquire the Zoom system provided by Zoom Video Communications.

Zoom helps universities and schools improve student outcomes with secure video communication services for hybrid classrooms, office hours, administrative meetings, and more. Zoom unifies cloud video conferencing, simple online meetings, group messaging, and a software-defined conference room solution into one easy-to-use platform.

When the system is in use at all places, we will carry out an assessment of the advantages and drawbacks encountered by the professors and students.

Summer schools

Two Hub Summer schools will take place this June, namely:

The Summer School on Cyber Physical Systems
June 10 - 14 in Stockholm, Sweden

Theme: Trustworthy Highly Autonomous CPS.
We have gathered the most prominent leaders in the field to make this week one of its kind. These, hopefully warm and sunny days will leave you with a deep understanding of the complexity of Autonomous CPS solutions and how different areas intertwine with each other.
Cyber-Physical Systems (CPS) integrate computation, networking and physical processes to provide products and services that are autonomous, intelligent, connected and collaborative.
Technology advances is now paving the way for a new era of Cyber-Physical Systems of Systems (CPSoS) that will have unprecedented capabilities but also unprecedented corresponding technological complexity – representing an ongoing technological shift with corresponding socio-technical implications.

Nordic IoT Summer School: Edge and Fog Computing
June 17-21, Lyngby, Denmark

The Nordic IoT Summer School is a week-long intensive introduction to all aspects of IoT systems. Rich sensor systems and distributed computation allow computing systems to measure and interact with the physical world. These emerging IoT systems will necessarily stretch from edge and fog computing devices that connect to cloud servers. Challenges at all levels of abstraction – devices, software, networks, architectures, and applications – must be faced to deliver on the potential of IoT systems technology.
Topics range across the design stack and network: low power VLSI edge devices, signal processing and control, security, algorithms, applications.
This summer school is a successor to two traditions: the DTU summer session on embedded computing and Georgia Tech summer schools on IoT and CPS.

All Hub students are encouraged to join these international acknowledged events.

Handbook with Hub activities

During the Yearly meeting it was agreed to launch a number of new Hub initiatives. The major driver would be the so-called Activity templates, i.e. a template that guides you through the steps needed to launch a Hub activity and an associated budget. The activities should mainly stimulate the activities of the non-senior staff of the Hub. During the Yearly meeting, the following suggestions were put forward:

- Book on IIoT
- Roadmap on IIoT (KTH has experience, facilitators)
- Workshop in the fall
- Repository: test cases, benchmarks, equipment info
- Distinguished Nordic IoT lecturer program
- IoT invited lectures (in our current courses)
- IoT Ambassadors
- Mobility program
- IoT Career Days
- Postdoc proposals brokerage (MSCA IF)
- IoT Forum
- Group profiles (dissemination)
- Proposal writing (consultancy for training & evaluation)
- Yearly conference (e.g., Fog IoT Workshop)

Please use the below link to put forward your suggested activities:
https://docs.google.com/spreadsheets/d/19zyg3x-KylrIMTzt1bmDoShwAFzgdzYHASOFbxHSYn0/edit#gid=0

A first selection of activities to be funded will be discussed in the monthly telco on June 6.

New PhD students associated with the Hub

Two new PhD students have been associated with the Hub. Please welcome:

- Koen Pieter Tange, DTU: Fog Computing Security
- Shane Daniel Geisler McLean, DTU; Configuration of Autonomous Vehicle System Platforms for Safety-Critical Applications

In total we now have 36 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.

The Nordic IIoT Hub workshop at the CPS Week in Montreal

The CPS-IoT Week which is the premier event on Cyber-Physical Systems and Internet-of-Things Research, this year also hosted a Nordic Hub event, namely a Workshop on Fog Computing and the IoT. It was organized by Paul Pop and Karl-Erik Årzén. The workshop included 14 presentations (from which five came from the Hub). It was attended by more than 20 participants