TELEMATIK NEWSLETTER

2014/1

News

New scientific researcher

Figure 1 Matthias Flittner

Since the first of October 2013, Matthias Flittner (Fig. 1) joined as a research assistant the team at the Institute of Telematics. He is involved in a EU-funded research project in the 7th Framework Programme called "SEcure Cloud computing for CRitical infrastructure IT" (SECCRIT) [www.seccrit.eu]. He mainly deals with the development of solutions designed to make cloud computing for operators of critical infrastructures available. The focus of his work is primarily the development of interfaces (APIs) and the consideration of transparency, traceability, auditability and legal frameworks in the field of cloud computing.

10/01/2013 Matthias Flittner <flittner@kit.edu>

Joachim Wilke defends his thesis successfully

On 31.10.2013 Joachim Wilke (Fig. 2) defended his thesis in the field of wireless sensor networks successfully. The entire research group shares his happiness. We congratulate Joachim and wish him all the best for his future career.

10/31/2013 Jens Horneber <horneber@kit.edu>

Figure 2 Dr. Joachim Wilke

Conferences & Workshops

TRUSTCOM2013 - Melbourne Australien

This years TRUSTCOM (Fig. 3) was held in Melbourne, Australia from July, 16th to 18th. Sören Finster presented the paper "Pseudonymous smart metering without a trusted third party". This was a joined work of Sören Finster and Ingmar Baumgart at the Institute of Telematics. The paper features privacy-aware smart metering using pseudonyms but manages to achieve this without using a trusted third party.

07/20/2013 Sören Finster <finster@kit.edu>

Conference on Local Computer Networks

Vom 21-24. Oktober 2013 fand die 38. IEEE Conference on Local Computer Networks (LCN) in Sydney Australien statt. Das ITM war gleich mit mehreren Beiträgen vertreten. So präsentierten Denis Martin und Christian Haas ihre Arbeiten

Figure 3 Welcome dance from aboriginal people at the conference dinner

"Evaluating a Framework for Different Networking Paradigms" bzw. "Evaluating the Energy- Efficiency of the Rich Uncle Key Exchange Protocol in WSNs" als Paper auf der Konferenz. Weiterhin konnte Martin Florian die Arbeit "Privacy in Overlay-based Smart Traffic Systems" innerhalb des Workshop on Privacy and Anonymity for the Digital Economy (PADE 2013) vorstellen. Auch auf der Demo Session konnte das ITM Präsenz zeigen: Anton Hergenröder stellte den Demonstrator "Energy- Efficient Security in Smart Metering Scenarios" aus dem KASTEL Projekt vor.

10/21/2013 Christian Haas <haas@tm.uka.de>

SmartGridComm 2013, Vancouver, Canada

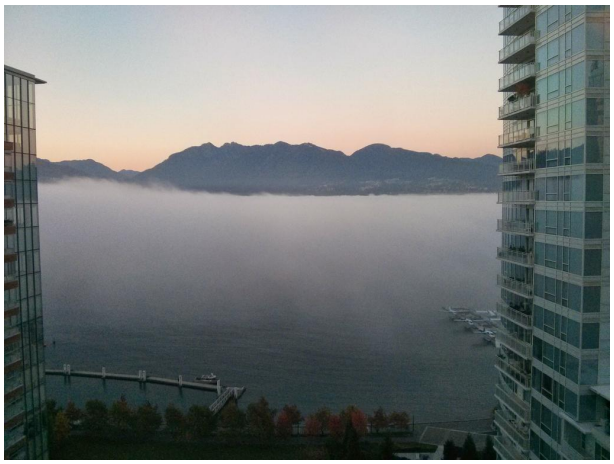

Figure 4 Fog over Vancouver Harbour

In October (21th to 24th) this years SmartGridComm (Fig. 4) was held in Vancouver, Canada. Sören Finster presented the paper "Smart Meter Speed Dating, short-term relationships for improved privacy in Smart Metering". Besides academic participants, industry was also present at the conference and very interested in solving the problem of privacy in Smart Metering.

10/30/2013 Sören Finster <finster@kit.edu>

Guests & Visits

MobiCom 2013 and visits at Bell Labs and the Columbia University

The 19th edition of the ACM MobiCom was held in Miami, Florida between September the 30th and October the 04th. This year, Martin Florian presented the demo "OverDrive - an Overlay-based Geocast Service for Smart Traffic Applications" there. The demo was developed in the context of the iZeus project. It presents an implementation of the geocast overlay "OverDrive" for the Overlay simulation framework "OverSim". Through an interactive visualization and an example application, both the internals of OverDrive and its applicability to smart traffic scenarios could be seen. Additionally, visitors were introduced to the new traffic simulation capabilities integrated into OverSim. Martin Florian spent the week preceding the Mobicom conference in the New York-New Jersey area. There, he visited Bell Labs Holmdel and the group of Prof. Henning Schulzrinne at the Columbia University in New York. He received a very warm welcome at both locations and held short talks about his research on communication architectures for smart traffic applications. Both talks resulted in fruitful discussions and a stimulating exchange with the attending researches.

09/30/2013 Martin Florian <florian@kit.edu>

References

S. FINSTER: *Smart Meter Speed Dating, short-term relationships for improved privacy in Smart Metering.* In *2013 IEEE International Conference on Smart Grid Communications (SmartGridComm)*, pages 426–431. IEEE, October 2013.

M. FLORIAN and I. BAUMGART: *Privacy in Overlay-based Smart Traffic Systems.* In *Proceedings of the IEEE Workshop on Privacy and Anonymity for the Digital Economy (PADE 2013)*. IEEE, October 2013.

M. FLORIAN, F. HARTMANN and I. BAUMGART: *A Socio- And Locality-Aware Overlay for User-Centric Networking.* In *Proceedings of the International Conference on Computing, Networking and Communications (ICNC 2014)*. IEEE, February 2014.

C. HAAS, J. WILKE and F. KNITTEL: *Evaluating the Energy-Efficiency of the Rich Uncle Key Exchange Protocol in WSNs.* In *Proceedings of the 38th IEEE Conference on Local Computer Networks (LCN)*. IEEE, October 2013.

A. HERGENRÖDER and C. HAAS: *Energy-Efficient Security in Smart Metering Scenarios.* Peer reviewed demonstrator, October 2013.

D. MARTIN and H. WIPPEL: *Evaluating a Framework for Different Networking Paradigms.* In *Proc. of the 38th IEEE Conference on Local Computer Networks (LCN 2013)*, pages 416–419, October 2013.

C. WERLE and O. WALDHORST: *Greedy Failure-Carrying Packets.* In *International Conference on Computing, Networking and Communications 2014*, February 2014.

J. WILKE: *Energieeffiziente Concast-Kommunikation in drahtlosen Sensornetzen.* PhD thesis, October 2013.

TELEMATIK NEWSLETTER
ISSN 1613–9410

Publisher: Institut of Telematics,
Karlsruhe Institute of Technology (KIT)
Prof. Dr. Martina Zitterbart
zitterbart@kit.edu
Editors: Jens Horneber <horneber@kit.edu>
Web: http://telematics.tm.kit.edu/newsletter/