

CloT'16 – Program 2nd Cloudification of the Internet of Things

November 23 – 25, 2016 Paris - France

www.ciot-conference.org



Wednesday, November 23rd 2016

9:00 – 9:15 Welcome and opening conference General Co-chair: Pr. Yutaka Takahashi, Kyoto University, Japan Chairman of the program Committee: Pr. Nadjib Aidsaadi, ESIEE Paris, France

9:15 – 10:30 Keynote speaker I

Hakima Chaouchi
(Institut Mines-Telecom, France)
Internet of Things: The Big Picture

10:30 - 11:00 Break

11:00 – 12:30 Session 1 – Services in IoT Cloud Session chair : Pr. H. Chaouchi - Institut Mines-Telecom, France

• Microservices in IoT clouds

Konstantinos Vandikas (Ericsson, Sweden & Samp; RWTH Aachen, Germany); Vlasios Tsiatsis (Ericsson, Sweden)

- A Cloud Computing Architecture for Spectrum Sensing as a Service Giuseppe Baruffa, Mauro Femminella, Matteo Pergolesi and Gianluca Reali (University of Perugia, Italy)
- IoT, Cloud Services, and Big Data: A Comprehensive Pricing Solution

Mauro Femminella, Matteo Pergolesi and Gianluca Reali (University of Perugia, Italy)

12:30 - 14:00 Lunch

14:00 – 15:30 Session 2 – Experimentations in IoT Cloud Session chair: Dr. A. Dandoush - ESME Sudria, France

 Distributed and Flexible Computing Testbed for Edge Cloud Computational Offloading

Abderrahmen Mtibaa (Texas A&M University, USA); Hend Gedawy (Carnegie Mellon University Qatar, Qatar); Sannan Tariq (Carnegie Mellon University, Qatar); Khaled A. Harras (Carnegie Mellon University, USA)

A Full Stack for Quick Prototyping of IoT Solutions

Daniele Mazzei (University of Pisa, Italy); Giacomo Baldi (Zerynth, Italy); Gabriele Montelisciani and Gualtiero Fantoni (University of Pisa, Italy)

 Comparison of IoT Platform Architectures: A Field Study based on a Reference Architecture

Jasmin Guth and Michael Falkenthal (Institute of Architecture of Application Systems, University of Stuttgart, Germany); Uwe Breitenbücher (Universität Stuttgart, Germany); Lukas Reinfurt (Institute of Architecture of Application Systems, University of Stuttgart, Germany); Frank Leymann (Universität Stuttgart, Germany)

15:30 – 16:00 Break

16:00 - 17:30 Session 3 - Optimization of protocols in IoT Cloud Session chair: Yazid Lyazidi - UPMC, France

- A Relay-based IEEE 802.11ah network solution for Smart City
 Nurzaman Ahmed and Md. Iftekhar Hussain (North-Eastern Hill University, India)
- A Protocol for Setting up Ad hoc Mobile Clouds over Spontaneous MANETs: A Proof of Concept

Bilel Zaghdoudi (Faculty of Science of Tunis, University of El Manar, Tunisia); Hella Kaffel-Ben Ayed (University of Tunis El Manar & Diversity of Manouba, Tunisia); Islem Gnichi (Faculty of Science of Tunis, University of El Manar, Tunis, Tunisia)

 A hybrid data aggregation scheme for provisioning Quality of Service (QoS) in Internet of Things (IoT)

Hafizur Rahman, Nurzaman Ahmed and Md. Iftekhar Hussain (North-Eastern Hill University. India)

Thursday, November 24^{th,} 2016

9:15 – 10:30 Keynote speaker II

Steven Martin

(University Paris-Sud, France)

Network of drones: a flying Cloud

11:00 – 12:30 Session 4 – Security in IoT Cloud Session chair: Salvatore Costanzo – UPMC, France

 Limitations of the Pub/Sub Pattern for Cloud Based IoT and Their Implications

Daniel Happ (TU Berlin, Germany); Adam Wolisz (TUB, Germany)

- OAuthing: Privacy-enhancing Federation for the Internet of Things
 Paul Fremantle and Benjamin Aziz (University of Portsmouth, United Kingdom)
- Community-based wireless IoT infrastructure using ubiquitous vending machines

Yozo Shoji, Kiyohide Nakauchi and Wei Liu (National Institute of Information and Communications Technology, Japan)

12:30 - 14:00 Lunch

14:00 – 15:30 Keynote speaker III

Giovanni Pau

(UCLA, USA)

Internet of Things in the Vehicle

15:30 - 16:00 Break

16:00 - 17:00 Keynote speaker IV

Vincent Champain

(CEO Digital foundry - GE, France)

Internet of Industrial things

17:00 – 18:00 Session 5 – Edge / Mobile Cloud Session chair: Dr. A. Dandoush - ESME Sudria, France

 Edge-Fog Cloud: A Distributed Cloud for Internet of Things Computations

Nitinder Mohan and Jussi Kangasharju (University of Helsinki, Finland)

 Cognitive Agent Oriented Architecture of Internet-of-Thing Applications in Heterogeneous Clouds of Mobile Edge Computing Vikas S Shah (Wipro Technologies, USA)

19:30 – 22:30 Gala dinner

Friday, November 25th, 2016

9:15 – 10:30 Keynote speaker V

Hervé Ganem

(Gemalto, France)

Internet of Thinks: connect, secure, monetize

10:30 – 11:00 Break

11:00 – 12:30 Session 6 – Performance of IoT Cloud Session chair: Dr. I. Fajjari - Orange Labs, France

 Performance Analysis of Traffic Classification in an OpenFlow Switch

Shota Ogasawara and Yutaka Takahashi (Kyoto University, Japan)

 An SLA-based Resource Allocation for IoT Applications in Cloud Environments

Anand Singh and Yannis Viniotis (North Carolina State University, USA)

 Appliance Recognition using AGILASx Dataset for Intrusive Load Monitoring and Machine Learning Approaches

Marcel Lowell Villanueva (Universitie de Lorraine & Description de Manila University, France); Samuel Matthew Dumlao and Rosula Reyes, S. J. (Ateneo de Manila University, Philippines)

12:30 – 14:00 Lunch

14:00 – 15:00 Keynote speaker VI Pascal Urien

Tamper resistance, secure communications, and storage: three prerequisites for the Internet of Things

15:00 – 15:30 Conference Closing