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**CloT 2018** 

July 2 - 4, 2018 Paris, France

# Program CloT 2018

	2-Jul-18		July 3, 2018		July 4, 2018	
	Welcome coffe					
8:45	Opening conference					
9:00		9:00	Keynote 1: 5G and IoT - Separating Hype from Promise	9:00	Keynote 3: The "Cloud" to "Things" Continuum	
	<u>Tutorial 1</u> Cloudification of the Internet of Things with OCCIware	10:30	<u>Keynote 2:</u> Software systems engineering for the ambiant internet - from the cloud to the fog for the IoT	10:30	<u>Technical Session 4:</u> IoT applications for Cellular Networks	
12:00	Lunch Break	11:30	<u>Technical Session 2:</u> Iot Infrastructure and Resource Management	11:45	Demo Session	
13:30		12:45	Lunch Break	12:45	Lunch Break	
	<u>Tutorial 2</u> Wireless Body Networks for Healthcare	14:00	<u>Special Session:</u> Connected/autonomous vehicles and communication networks.	14:00	<u>Panel</u> Mixing IoT technologies for	
	heathcare	15:15	<u>Invited Talk</u> Blockchain IoT (BIoT): A New Direction for Solving Internet of Things Security and Trust Issues.		better performances.	
16:00	Coffee Break	16:15	Coffee Break	16:00 - 16:30	Closing ceremony/Award	
16:30 - 17:45	<u>Technical Session 1:</u> IoT Services and Enabling Technolgies	16:45 - 18:00	Technical Session 3: IoT Security and Privacy			
		20:00	Gala Dinner			



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## **CIOT 2018 Keynote Speakers**



#### Henning Schulzrinne (Columbia University, USA) "5G and IoT - Separating Hype from Promise"

**Prof. Henning Schulzrinne** is Julian Clarence Levi Professor of Computer Science at Columbia University. He received his undergraduate degree in economics and electrical engineering from the Darmstadt University of Technology, Germany, his MSEE degree as a Fulbright scholar from the University of Cincinnati, Ohio and his

Ph.D. from the University of Massachusetts in Amherst, Massachusetts. He was a member of technical staff at AT&T Bell Laboratories, Murray Hill and an associate department head at GMD-Fokus (Berlin), before joining the Computer Science and Electrical Engineering departments at Columbia University, New York. From 2004 to 2009, he served as chair of the Department of Computer Science. From 2010 to 2011, he was an Engineering Fellow at the Federal Communications Commission (FCC); he is currently the CTO of the FCC.

He is editor of the "Computer Communications Journal", the "ACM Transactions on Multimedia Computing", the "ComSoc Surveys & Tutorials" and a former editor of the "IEEE Transactions on Image Processing", "Journal of Communications and Networks", "IEEE/ACM Transactions on Networking" and the "IEEE Internet Computing Magazine".

He has been a member of the Board of Governors of the IEEE Communications Society and is vice chair of ACM SIGCOMM, former chair of the IEEE Communications Society Technical Committees on Computer Communications and the Internet and has been technical program chair of Global Internet, IEEE Infocom 2000, ACM NOSSDAV, IEEE IM, IPTComm 2008, IFIP Networking 2009 and IPtel and general co-Chair of ACM Multimedia 2004 and ICNP 2009. He serves on the Internet2 Applications, Middleware and Services Advisory Council and have led a working in the NSF GENI project. He also has been a member of the IAB (Internet Architecture Board). He serves on a number of conference and journal steering committees, including for the IEEE/ACM Transactions on Networking. He has published more than 250 journal and conference papers, and more than 70 Internet RFCs. Protocols co-developed by him are now Internet standards, used by almost all Internet telephony and multimedia applications. His research interests include Internet multimedia systems, quality of service, and performance evaluation. He served as Chief Scientist for FirstHand Technologies and Chief Scientific Advisor for Ubiquity Software Corporation.

He is a Fellow of the IEEE, has received the New York City Mayor's Award for Excellence in Science and Technology, the VON Pioneer Award, TCCC service award and the IEEE Region 1 William Terry Award for Lifetime Distinguished Service to IEEE.

**Abstract:** 5G and the Internet of Things (IoT) have entered a symbiotic hype relationship - 5G will enable IoT and IoT will provide the incremental revenue to motivate deploying 5G. Billions and billions (to quote Carl Sagan) of IoT devices are supposedly in our stars, but little is said what actually makes economic sense to deploy and what kind of deployment seems most plausible. We will look at IoT deployment models, what kind of networks they may require, and what kind of economic impact this is likely to have on network revenue. Similarly, we consider whether 5G is wise to bank on IoT to underwrite its business model, and what lessons we might learn from the previous four generations of cellular networks.



#### Raouf Boutaba (University of Waterloo, Canada) " The "Cloud" to "Things" Continuum "

**Raouf Boutaba** is a Professor of Computer Science and Associate Dean Research of the faculty of Mathematics at the University of Waterloo. He is the founding Editor in Chief of the IEEE Transactions on Network and Service Management (2007-2010), and on the editorial board of other journals. He served as the general or technical

program chair for a number of international conferences including IM, NOMS and CNSM. His research interests are in the areas of network and service management.

He has published extensively in these areas and received several journal and conference Best Paper Awards such as the IEEE 2008 Fred W. Ellersick Prize Paper Award. He also received other recognitions, including the Premier's Research Excellence Award, Industry research excellence Awards, fellowships of the Faculty of Mathematics, of the David R. Cheriton School of Computer Science and outstanding performance awards at the University of Waterloo.

He has also received the IEEE Communications Society Hal Sobol Award and the IFIP Silver Core in 2007, the IEEE Communications Society Joe LociCero and the Dan Stokesbury awards in 2009, the Salah Aidarous award in 2012, the McNaugthon Gold Medal in 2014, the Technical Achievement Award of the IEEE Technical Committee on Information Infrastructure and Networking as well as the Donald W. McLellan Meritorious Service Award in 2016. He served as a distinguished lecturer for the IEEE Computer and Communications Societies. He is fellow of the IEEE, a fellow of the Engineering Institute of Canada and a fellow of the Canadian Academy of Engineering.

Abstract: Back in 2011, we introduced the concept of a multi-tier cloud as part of the "Smart Applications on Virtualized Infrastructure (SAVI)" NSERC Strategic Network Project. SAVI extends the traditional cloud computing environment into a two-tier cloud including smart edges - small to moderate size data centers located close to the end-users (e.g., service provider premises), and massive scale data centers with abundant high-performance computing resources typically located in remote areas. We designed the smart edge as a converged infrastructure that uses virtualization, cloud computing and network softwarization principles to support multiple network protocols, customizable network services, and high-bandwidth low latency applications. Since then the concept of a multi-tier cloud has been widely adopted by telecom operators and in initiatives such as the Mobile Edge Computing (MEC). In the meantime, the advent of the Internet of Things (IoT) has seen an explosive growth in the number of connected devices generating a large variety of data in high volumes at high velocities. The unique set of requirements posed by the IoT data demands innovation in the information infrastructure with the objective of minimizing latency and conserving bandwidth resources. The multi-tier cloud computing model proposed in SAVI falls short in addressing the needs of the IoT applications, since, most voluminous, heterogeneous and short-lived data will have to be processed and analyzed closer to IoT devices generating the data.

Therefore, it is imperative that the future information infrastructure should incorporate more tiers (e.g., IoT gateways, customer premise equipments) into the multi-tier cloud to enable true at-scale end-to-end application orchestration. In this keynote, we will discuss the research challenges in realizing the future information infrastructure that should be massively distributed to achieve scalability; highly interoperable for seamless interaction between different enabling technologies; highly flexible for collecting, fusing, mining, and processing IoT data; and easily programmable for service orchestration and application-enablement.



#### **Thierry Coupaye** (Orange Labs, France)

#### "Software systems engineering for the ambiant internet - from the cloud to the fog for the IoT"

**Thierry Coupaye** is head of research on Internet of Things (IoT) inside Orange Labs and Orange Expert on Future Network. Prior to that, after he completed his PhD in Computer Science in 1996, he had several research and teaching positions at Grenoble University (research

on active database systems), European Bioinformatics Institute (Cambridge, U.K., research on semi-structured data management for molecular biology) and Dassault Systems (research on large scale software deployment).

He joined Orange (formerly France Telecom) in 2000 where he had several research expert, project manager, project and program director positions in the area of distributed systems architecture, autonomic computing, cloud computing and networking, fog computing. He is the author of more than 60 refereed articles, has participated in multiple program and organization committees of conferences in these areas (IEEE CloudCom, IFIP NoF, IFIP/



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IEEE CNSM, IEEE ICAC, IEEE ICCAC, ACM CBSE...). He has been involved in several collaborative projects and is a regular expert for French (ANR, Inria) and European research agencies (european expert group on Cloud Computing, european expert group on Software and Services...).

Paris, France

Abstract: Since their inception the Internet and the Web have drastically evolved from simple interconnection of computers and exchange of information between people to a planet-wide platform supporting social networks and a plethora of digital services. Another revolution is on its way with the advent of the Internet and the Web of Things. Beyond the simple extension of the Internet to a bunch of fancy connected devices, the true meaning of the IoT is the hybridation of the digital and the physical world leading to a generalised ambient intelligence, an ambiant internet. This phenomenon will have profound impact on the way we interact with digital services and physical objects, and on infrastructures and software platforms underlying such cyberphysical systems. This talk will discuss the vision of the ambiant internet, and associated challenges in ubiquitous computing in connection with the ongoing move of the cloud towards the (extreme) edge of the network, close to the objects on the field (the fog).

### **CIOT 2018 Tutorial Speakers**

# **Tutorial 1:** "Cloudification of the Internet of Things with OCClware"

Abstract: This tutorial covers the cloudification of the Internet of Things, i.e., the marriage of the Internet of Things (IoT) and Cloud Computing. On the one hand, data collected by IoT sensors are sent to big data analytics running in the clouds. On the other hand, IoT actuators are orchestrated (controlled) by business processes running in the clouds. However, these two converging scenarios are tricky to implement as both the IoT and Cloud Computing suffer from a lack of a standard networked API for managing IoT actuators/ sensors and cloud resources. Then cloudified IoT applications must deal with the extreme heterogeneity of both IoT and Cloud Computing technologies. Fortunately, there exists an open cloud standard called Open Cloud Computing Interface (OCCI) to address heterogeneity, interoperability, integration and portability in Cloud Computing. OCCI comprises a set of open community-lead specifications delivered through the Open Grid Forum. In a nutshell, OCCI is a RESTful Protocol and API for all kinds of management tasks on any kind of cloud resources, including Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS), and potentially Everything as a Service (XaaS) from hardware resources to business applications .Based on the OCCI standard, the OCCIware funded project (see www.occiware. org ) develops an open-source, model-driven, and reference toolchain for modeling, developing, deploying and managing Everything as a Service with OCCI. The OCCIware tool chain is implemented on top of the Eclipse Modeling Framework (EMF) and its associated technologies such as Ecore, OCL, Acceleo, Xtext, and Sirius. This tool chain has already successfully been applied on VMware as a Service, OpenStack as a Service, Docker as a Service, Big Data as a Service, Linked Data as a Service, Mobile Robotics as a Service, and IoT as a Service. This tutorial shows how the OCCIware tool chain can be practically used for the cloudification of the Internet of Things.



#### Walid Gaaloul

(Telecom SudParis, Université Paris-Saclay, France)

**Walid Gaaloul** is professor in TELECOM SudParis an engineering school of Université Paris-Saclay. He is member of the Computer Science Departmentand the CNRS research laboratory SAMOVAR. Before joining TMSP, he was a researcher at the Digital Enterprise Research Institute (DERI) and an adjunct lecturer in the National University of Ireland, Galway (NUIG). He holds an M.S. (2002) and a Ph.D. (2006) in computer science

from the University of Lorraine-France. He was a junior researcher in the Lorraine Laboratory of IT Research and its Applications (LORIA-INRIA) and a teaching assistant in the University of Lorraine-France. His research interests are on Business Process Management, Service Oriented Computing, Cloud Computing, Process intelligence, and semantics for B2B Integration. Walid Gaaloul has published over 100 research papers in these domains. He serves as program committee chair, and member, and reviewer at many international journals and conferences and has been participating in several national and European research projects.



# Faiez Zalila

(Inria Lille - Nord Europe, France)

**Faiez Zalila** is postdoctoral researcher at Inria Lille - Nord Europe within the Spirals research team. He is interested in software engineering,including model driven software engineering (MDE), software languageengineering (SLE) and software validation & verification (V&V). He received the Ph.D. degree in computer science from National Polytechnics Institute of Toulouse (INP Toulouse) in 2014, and the M.Sc. degree in computer science from

the University of Paul Sabatier Toulouse 3 in 2010.His thesis focused on the integration of formal verification activity for domain-specific languages. In 2015, he joined the LAAS laboratory, as postdoctoral fellows, and worked on the development of the verification toolchain for the architectural language AADL. In 2016, he became a postdoctoral researcher at the IRT Saint Exupéry (IRT AESE). He designed and implemented an interactive step-by-step simulator for the Fiacre formal language. InFebruary 2017, he joined the OCClware project and contributes on the definition and the development of the OCClware Studio 2.0.

#### Tutorial 2: "Wireless Body Networks for Healthcare"

**Abstract:** Nowadays, interests in Healthcare Monitoring System (HMS) based on Wireless Body Area Network (WBAN) and Cloud computing have grown considerably due to the increasing aging population. HMS expected to reduce healthcare expenses by enabling the continuous monitoring of patient health remotely during their daily activities. From a medical point of view, WBAN will emerge as a key technology in providing real-time health monitoring and diagnoses of many life threatening diseases (Heart attack, Stroke, Epilepsy, Diabet, ...).

Accordingly, several studies have been done in this area and already various journal and conference papers focusing either on WBAN or on cloud-based healthcare services. Nevertheless, there is no extensive coverage on the HMS based on WBAN.

This tutorial will focus on the WBAN in terms of emerging wireless technologies (supporting infrastructure and technology), HMS architecture and its applications (Continuous Monitoring and Assisted Living) and challenge design issues related to WBAN (energy-saving MAC and routing layers as well as security and fault management). Furthermore, this tutorial can be considered as a technical overview of the state-of-the-art in the WBAN and HMS fields.

Ahmed Mehaoua (University of Paris Descartes, France) *"Wireless Body Networks for Healthcare"* 

Ahmed Mehaoua received the M.Sc. and Ph.D. degrees in computer science from the University of Paris, Paris, France, in 1993 and 1997, respectively. He is currently a Full Professor of computer networking in the Faculty of Mathematics and Computer Science, at University of Paris Descartes, Paris, France. He is also the Head of

the Department of Multimedia Networking and Security at the LIPADE, a governmental computer science research center in Paris, France.

His research interests include video communication, resource optimization, security and anomaly detection in wireless networks.



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## **CIOT 2018 Panel Speaker**



#### Khaldoun Al Agha (Paris-Sud University, France) "Mixing IoT technologies for better performances."

**Khaldoun Al Agha** is Full Professor at Paris-Sud University. Khaldoun Al Agha received his habilitation degree (2002) from Paris Sud University, his PhD (1998), his Master degree (1995) from Versailles University and his engineering degree (1993) from the Ecole Supérieure

d'Electricité (1993). From 2010-2013, he was leading at EIT Digital, the European action line "Digital Cities of the Future". In 2010 he create wih Guy Pujolle Green Communications that provides products for embedded Internet and services over robust mesh networks. Khaldoun Al Agha is leading many projects on telecommunication networks and published more than 150 papers in journals and conferences.

**Abstract:** Internet of Things is developing very fast to provide solutions to resolve problems in many verticals of our life: Health and wellbeing, smart building, smart cities, security, automation, smart industry... Those verticals are working under different constraints where finding a common denominator is completely impossible. Hence, technologies to offer connectivity to things couldn't satisfy all the constraints and should focus on specific problem.

Constraints of the IoT verticals are the resources that we should save because they represent the weakness of the things that we try to make smart. For example, a sensor that we introduce in the human body should have a permanent energy source (a battery coin that should work for at least 20 years); while a video surveillance camera is connected to a power supply and need high bandwidth network.

From the other side, technologies offer solutions for IoT that optimize dedicated vertical resources. There is no existing technology that could optimize at the same time the energy, the bandwidth, the security, the localization, and the cost.

The objective of the Panel is to debate around the Intelligence we need to provide to IoT solutions in order to switch between technologies while optimizing resources.



Henning Schulzrinne (Columbia University, USA)



Raouf Boutaba (University of Waterloo, Canada)



#### Jean Schwoerer (Orange Labs, France)

Jean Schwoerer leads the research project "Massive IoT Connectivity" which brings together, within Orange Labs, the research on connectivity technologies for IoT objects.

He is interested in the evolution of mobile networks for IoT as well as non-cellular connectivity technologies. Jean Schwoerer joined Orange Lab in 2005 after obtaining his PHD in electronics from the National Institute of Applied

Sciences in Rennes. He is also delegated to 3GPP RAN1 for Orange.





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## CIOT 2018 Program - Monday, July 2

#### 08:45-09:00 Opening Session

# 09:00-12:00 Tutorial 1: Cloudification of the Internet of Things with OCCIware

Walid Gaaloul (Telecom SudParis, Université Paris-Saclay, France) Faiez Zalila (Inria Lille - Nord Europe, France) Philippe Merle (Inria Lille - Nord Europe, France)

#### 12:00-13:30 Lunch Break

13:30-16:00 Tutorial 2: Wireless Body Networks for Healthcare

Ahmed Mehaoua (University of Paris Descartes, France)

#### 16:00-16:30 Coffee Break

16:30-17:45 TS 1: IoT Services and Enabling Technolgies Session chair: Sachin Pawaskar(University of Nebraska at Omaha, USA)

Intelligence of Things: Opportunities & Challenges Hany Atlam, Robert Walters and Gary Wills (University of Southampton, United Kingdom (Great Britain)

# Bio-Inspired vs Classical solutions to Overcome the IoT Challenges

Ranida Hamidouche and Zibouda Aliouat (University Ferhat Abbas Setif 1 El bez, Algeria); Abdelhak Mourad Gueroui (University of Versailles, France)

#### Towards An Efficient Key Management and Authentication Strategy for Combined Fog-to-Cloud Continuum Systems

Sarang Kahvazadeh (CRAAX/UPC, Spain); Xavier Masip-Bruin (Universitat Politècnica de Catalunya & Advanced Network Architectures Lab (CRAAX), Spain); Rodrigo Diaz Rodriguez (Atos, Spain); Eva Marín-Tordera (Technical University of Catalonia UPC, Spain); Alejandro Jurnet (Co-author, Spain); Jordi Garcia (Universitat Politecnica de Catalunya -UPC BarcelonaTech, Spain)

## CloT 2018 Program - Tuesday, July 3

# 9:00-10:00 Keynote 1: 5G and IoT - Separating Hype from Promise

Henning Schulzrinne (Columbia University, USA)

#### 10:00-10:30 Coffee Break

10:30-11:30 Keynote 2: Software systems engineering for the ambiant internet - from the cloud to the fog for the IoT

Thierry Coupaye (Orange Labs, France)

11:30-12:45 TS 2: lot Infrastructure and Resource Management

Session chair: Salvatore Costanzo(LIP6 - Sorbonne University, France)

# A cloud-based virtual network operator for managing multimodal LPWAN networks and devices

Jeroen Hoebeke, Jetmir Haxhibeqiri, Bart Moons, Matthias Van Eeghem, Jen Rossey and Abdulkadir Karaagac (University of Ghent, Belgium);

Jeroen Famaey (University of Antwerp & Imec, Belgium) fog05: Unifying the computing, networking and storage fabrics end-to-end

Angelo Corsaro (ADLINK Technologies, France); Gabriele Baldoni (ADLINK Technology, France)

#### Reprogramming Low-end IoT Devices from the Cloud

Emmanuel Baccelli (INRIA, France); Jörg Dörr (Fraunhofer-Institut für Experimentelles, Germany); Ons Jallouli (RunMyProcess, France); Shinji Kikuchi (Fujitsu Laboratories Ltd., Japan); Andreas Morgenstern (Fraunhofer-Institut, Germany); Francisco Acosta and Kaspar Schleiser (Inria); Ian Thomas (RunMyProcess)

#### 12:45-14:00 Lunch Break

14:00-15:15 Special Session: Connected/autonomous vehicles and communication networks. Session chair: Houda Labiod (Telecom Paris Tech, France)

Extending Vehicles' Perception by V2x Cooperation

Oyunchimeg SHAGDAR (Vedecom, France)

#### V2x Communications

Antonella Molinaro (Mediterranean University of Reggio Calabria, Italy)

#### Data Analytics in Vehicular Communications

A.Yedes (Telecom ParisTech), H. Labiod(Telecom ParisTech), R. Khatoun(Telecom ParisTech), H. Afifi (Telecom SudParis)

15:15-16:15 Invited Talk: Blockchain IoT (BIoT): A New Direction for Solving Internet of Things Security and Trust Issues.

Chaired by Pascal Urien (Telecom Paris Tech, France)

#### 16:15-16:45 Coffee Break

16:45-18:00 TS 3: IoT Security and Privacy Session chair: Jeroen Hoebeke(Ghent University - imec, Belgium)

#### Decentralized IoT Security Gateway

lifan Tyou, Hiroki Nagayama, Takuya Saeki and Yukio Nagafuchi (NTT, Japan); Masaki Tanikawa (NTT Secure Platform Laboratories, Japan)

Expressive Searchebale Encryption with Access Control in Multi-CloudIoT

Farida Ali Guechi (University of Skikda, Algeria)

#### Securing IoT Uplink Communications Against Eavesdropping

Stefano Iellamo (Sorbonne University, France); Raoul Guiazon (University of Leeds, UK); Marceau Coupechoux (Telecom ParisTech, France); Kai-Kit Wong (University College London, UK)

20:00-23:00 Gala Dinner



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### CIOT 2018 Program - Wednesday, July 3

# 9:00-10:00 Keynote 3: The "Cloud" to "Things" Continuum

Raouf Boutaba (University of Waterloo, Canada)

#### 10:00-10:30 Coffee Break

**10:30-11:45 TS 4: IOT applications for Cellular Networks** Session Chair : Ilhem Fajjari (Orange labs, France)

# Impact of the Application Layer Protocol on Energy Consumption, 4G Utilization and Performance

Johannes Hofer (Information Systems & Quantitative Analysis University of Nebraska at Omaha Omaha, United States); Sachin Pawaskar (University of Nebraska at Omaha, USA)

#### Performance Analyses of Quantized Congestion Notification for 5G Radio Access Network

Yi Liang and Lingge Jiang (Shanghai Jiao Tong University, P.R. China); Chen He (Shanghai Jiaotong University, P.R. China); Di He (Shanghai Jiao Tong University, P.R. China)

#### Dynamic Network Slicing for 5G IoT and eMBB services: A New Design with Prototype and Implementation Results

Salvatore Costanzo (LIP6 - Sorbonne University, France); Ilhem Fajjari (Orange labs, France); Nadjib Aitsaadi (ESIEE Paris & Laboratory of Computer Science Gaspard-Monge - LIGM / CNRS (UMR 8049), France); Rami Langar (University Paris Est Marne-la-Vallée, France)

#### 11:45-12:45 Demo Session

Session Chair : Nadjib Aitsaadi (ESIEE Paris, France)

#### Orchestration of IoT Device and Business Workflow Engine on Cloud

Shinji Kikuchi (Fujitsu Laboratories Ltd., Japan); Ian Thomas (Fujitsu, UK); Ons Jallouli (RunMyProcess, France); Jörg Dörr (Fraunhofer-Institut für Experimentelles, Germany); Andreas Morgenstern (Fraunhofer-Institut, Germany); Emmanuel Baccelli (INRIA, France); Kaspar Schleiser (RIOT, Germany)

#### WAZIUP, an Open and Versatile Long-range IoT Framework to Fully Take Advantage of the Cloudification of the IoT

CongDuc Pham and Mamour Diop (University of Pau, France)

#### A Cloud-based Virtual Network Operator for Managing Multimodal LPWANs and Devices

Bart Moons (University of Ghent, Belgium); Jetmir Haxhibeqiri (IDLab, Ghent University - imec, Belgium); Matthias Van Eeghem (University of Ghent, Belgium); Jen Rossey (imec - IDLab - Ghent University, Belgium); Abdulkadir Karaagac (University of Ghent, Belgium); Stefano Salvatore Quattrocchi (University of Catania, Italy); Michiel Aernouts (University of Antwerp, Belgium); Jeroen Famaey (University of Antwerp & Imec, Belgium); Jeroen Hoebeke (Ghent University - imec, Belgium)

#### 12:45-14:00 Lunch Break

14:00-16:00 Panel: Mixing IoT technologies for better performances

Moderator : Khaldoun Al Agha (Paris-Sud University, France)

#### 16:00-16:30 Closing ceremony/Award





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# CloT 2018 Venue

# Welcome to Orange Gardens

44, Avenue de la République - 92320 Châtillon

#### Arriving by public transport

Visitor entrance: 44, Avenue de la République

From Central Paris: Métro Line 13 + Orange Gardens shuttles

Two electric shuttles serve the main Orange Gardens entrance in the morning and at the end of the day. One serves the Châtillon Centre T6 tram stop, and the other the car park at the SNCF Technicentre, 166 Avnue de la République, 200m from the Métro Line 13 terminus.

#### Shuttle times:

TRAM circuit, from 8am to 9:45am, and 5:15pm to 7:15pm
Métro circuit, from 8:30am to 9:45am, and 5:30pm to 7:30pm

Three bus routes serve Orange Gardens from the Métro Line 13 terminus: the 388, 294, and 195.

#### Arriving by car

Visitor car park entrance: 71, Boulevard de la Liberté

To access the visitor car park, you need to show ID, and give the name of the person you have come to see or the event you will be taking part in.

- Allocated visitor spaces are at the far end of Level -1, by the lifts.
- 400 allocated electric vehicle spaces.
- **3%** of spaces are reserved for visitors with disabilities
- GPS Coordinates: Longitude: 2.292701 / Latitude: 8-48.801601



#### Getting to Orange Gardens

#### From Paris-CDG airport

- RER Line B to Arcueil-Cachan, then Bus 162 (approx. 1h20)
- By car via A1 and Périphérique to Porte de Châtillon (approx: 1hr)

#### From Orly airport

- Orlybus or Orlyval + RER Line B to Bourg-la-Reine + Bus 388 (approx: 1hr) By car via A106 and D906 towards
- Avenue de la République, Châtillon (approx. 25 mins)

#### From Châtelet

- Métro Line 4 + Line 13 + shuttle (approx. 40 mins)
- By car via Rue Saint-Jacques to traffic circle on Avenue Jean Moulin, then D906 towards Avenue de la République, Châtillon (approx. 40 mins)

**CloT 2018 Dinner** 





The Conference dinner will take place on Tuesday July 3, 2018 at :

### *"La Coupole"* 102 Boulevard du Montparnasse,

75014 Paris

#### By Metro: M13 to station Montparnasse Bienvenüe

or

By Bus/Metro: Bus 388 to station Porte d'Orléans then M4 to station Vavin



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## **General Co-Chairs**

Nadjib Aitsaadi (ESIEE Paris, France)

**Tutorials Co-Chairs** 

**Demonstration Co-Chairs** 



Chris Blondia (University of Antwerp, Belgium)



Harry Perros (NCSU, USA)

# **TPC Co-Chairs**



Ilhem Fajjari (Orange Labs, France)



Hassnaa Moustafa (Intel Corporation, USA)

# **Keynotes Chair**



Filip De Turck (Ghent University, Belgium)

# **Publicity Chair**



Abdulhalim Dandoush (ESME Sudria, France)



**Publication Chair** 

Yazid Lyazidi (UPMC, France)

## **Overall Arrangements**



**Mohamed Faten Zhani** 

(ÉTS, Canada)

Alberto Schaeffer-Filho (UFRGS, Brazil)



Walter Cerroni

(University of Bologna, Italy)

Marc-Oliver Pahl (TUM, Germany)



Aziza Lounis (DNAC, France)



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## **Steering Committee**

#### Members

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**CloT 2018** 

July 2 - 4, 2018 Paris, France

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