

# NTTData



# **Future Devices & Technologies SIG** 'Robots: Assistance, Automation, Entertainment'

22<sup>nd</sup> November 2018

# Sponsored by NTT Data and hosted by NTT Communications

The Future Devices & Technologies SIG is championed by Dev Audsin of Beko, Zahid Ghadialy of Parallel Wireless UK & EMEA, Charles Sturman of Huawei Technologies Research & Development (UK) and Paul Tindall of Frontier Silicon

	Venue: NTT Communications, 1 King William St, London EC4N 7AR
<b>AGENDA</b>	
14:30	Registration, networking and refreshments
15:15	CW welcome, Zahid Ghadialy, Future Devices & Technologies SIG Champion
15:20	Welcome from event sponsor NTT Data and event host NTT Communications
15:25	Introduction to Future Devices & Technologies SIG by Zahid Ghadialy, SIG Champion
15:35	Session to be chaired by Zahid Ghadialy, Future Devices & Technologies SIG Champion
	'The Imagination Algorithm' - Designing Experience
	Sebastian Conran, CEO, Consequential Robotics Ltd
	This presentation will cover the transformation of academic research and resulting technologies into emotionally engaging user experiences through the employment of rigorous design & innovation process and application of creative thinking.
15:55	Q & A
16.05	'Human machine collaboration: is working together the answer to high performing robots?'
	Christina Georgiou, Consultant, PA Consulting Group
	"Robotics" and "AI" are no longer terms just found in science fiction books and blockbuster films: robots and AI are becoming more and more ubiquitous, and are being used in factories, warehouses, hospitals, farms and homes. As they operate in a larger number of unstructured and often unpredictable environments, these machines need to be able to learn, adapt, and work alongside humans. This talk will explore how building human-robot teams can improve the performance of both human and robot and discuss a case study of a human-robot collaboration team for search and rescue developed at PA Consulting.
16:25	Q & A
16:35	Refreshments and networking
17:05	Session to be chaired by Charles Sturman, Future Devices & Technologies SIG Champion
	'Robots in Telecoms World'
	Zahid Ghadialy, Senior Director, Strategic Marketing, Parallel Wireless
	Robots are used in variety of ways in telecoms industry. Not only working smartphones and other devices, they are also used for many specialized tasks such as testing, machining, etc. This talk will look at some of these robots.
17:25	Q & A
17:35	'Our body, how soon augmented by machines?'
	Cécile Pacoret, Postdoctoral Researcher at the University of Geneva
	Bionic humans: science or fiction? Movies, but also media relays hopes, fears, progress, and miracles. What is actually happening in laboratories and clinics today? How far are we from therapeutics parts or augmented body for everyone? What are the ethical questions raised by artificial organs?

Q & A

17:55

18:05	Wrap-up by Dev Audsin, Future Devices & Technologies SIG Champion
18:10	End of session followed by networking and refreshments, kindly sponsored by NTT Data
19:30	Event closes

With the permission of the speakers, presentations will be loaded to the CW website following the event

# **Profile of organisers**

#### **Cambridge Wireless (CW)**

CW is the leading international community for companies involved in the research, development and application of wireless and mobile, internet, semiconductor and software technologies. With over 400 members from major network operators and device manufacturers to innovative start-ups and universities, CW stimulates debate and collaboration, harnesses and shares knowledge, and helps to build connections between academia and industry. CW's 19 Special Interest Groups (SIGs) provide its members with a dynamic forum where they can network with their peers, track the latest technology trends and business developments and position their organisations in key market sectors. CW also organises major conferences and start-up competitions along with other high-quality industry networking events and dinners. With headquarters at the heart of Cambridge, UK, CW partners with other international industry clusters and organisations to extend its reach and remain at the forefront of global developments and business opportunities. <a href="https://www.cambridgewireless.co.uk">www.cambridgewireless.co.uk</a>

# **Profile of sponsor**

#### **NTT Data**

NTT DATA is a leading IT services provider and global innovation partner headquartered in Tokyo, with business operations in over 40 countries. Our emphasis is on long-term commitment, combining global reach with local intimacy to provide premier professional services varying from consulting and systems development to outsourcing. <a href="https://www.nttdata.com">www.nttdata.com</a>

## **Profile of host**

#### **NTT Communications**

NTT Communications is the leading global provider of information and communications technology (ICT) solutions within NTT Group which ranks in the top 100 of the Fortune Global 500. <a href="https://www.ntt.com/en">www.ntt.com/en</a>

# **Profile of SIG Champions**

#### Dev Audsin, Beko

Dr. Dev Audsin is Senior Specialist at Beko Plc R&D, developing technologies for smart connected appliances. Prior to Beko, he was Principal Research Engineer at Orange. Before that he was Research Scientist at Hewlett Packard. Dev has a track record of creating successful technological solutions. <a href="https://www.beko.co.uk">www.beko.co.uk</a>

#### Zahid Ghadialy, Parallel Wireless UK & EMEA @zahidtg

Zahid Ghadialy is a Senior Director with a fast-moving and innovative US-based young company called Parallel Wireless (PW) that is on a mission to make deployment of any cellular infrastructure as easy and as cost-effective as Wi-Fi. With an extensive experience of over 18 years in the telecom industry as an engineer, programmer, analyst, researcher, architect, trainer, product manager and technical marketer, he is a technologist with a deep understanding of architecting world-class mobile products and solutions. Zahid is currently a member of Board of Directors at CW and 'Future Devices & Technologies' SIG champion. He has also previously been a 'Small Cell SIG' and 'Smart & Intelligent Cities SIG' champion. He is also a Non-Executive Director of eXplanoTech. In his spare time he blogs at 3G4G and you can also catch him on Twitter at @zahidtg. <a href="https://www.parallelwireless.com">www.parallelwireless.com</a>

## Charles Sturman, Huawei Technologies Research & Development (UK)

Charles is responsible for Product Marketing at Neul / Huawei Technologies in Cambridge, with responsibility for product strategy and business development in the NB-IoT market. Prior to this he lead u-blox' activities in the fast moving consumer IoT segment (wearables, smarthome and entertainment) following the acquisition of the

ARM Software Radio spin-out Cognovo, where we has founder and executive VP Sales & Marketing. Charles has held various positions in system design, business development and product marketing within Acorn Computers, TTPCom, Motorola and ARM. <a href="https://www.huawei.com">www.huawei.com</a>

#### Paul Tindall, Frontier Silicon

Paul Tindall recently worked in the Technology Office at Sepura PLC where he worked on Advanced Technology projects, investigating future technologies and strategies and was responsible for the companys software architecture. Prior to this Paul was the Software Architect for the Wireless Division of U-Blox where he created a novel Software Defined Modem (SDM) Platform for the latest generation of Wireless User Equipment using Model Driven Development techniques to develop Modem Physical Layers on Heterogeneous Multi-processors platforms. He was the Technical Director and Uber-Architect at TTPCom SW Business Unit where he developed wireless technology for 13 years. Paul also works in the Defence industry on a variety of MOD Defence projects. Paul has a 1st class honours degree from the Royal Military College of Science and is a Fellow of the BCS.

www.frontier-silicon.com

# **Profile of speakers**

# Sebastian Conran, Consequential Robotics

An engineer at heart, Sebastian Conran has design in the blood. He focuses on designing technologies to make them more emotionally engaging experiences. Passionate about designing thoughtful, stylish and ingenious products that are satisfying to use, he believes 'form follows fabrication' and by clearly understanding how things are to be made & experienced. As CEO of Consequential Robotics and Sebastian Conran Associates design studio, Sebastian takes a hands-on, down-to-earth approach to all his design projects, and is involved in all aspects throughout the innovation journey, sharing his wealth experience and manufacturing expertise with the design team. His studio's designs have received a plethora of awards for design & innovation as well as being granted many patents various fields. From working in the Habitat design studio in the 1970's to founding the Consequential Robotics in 2015, Sebastian's life has been focused on understanding how things are made, sold, used and experienced. He has taught at many design colleges including Visiting Professor at Central St Martins Innovation faculty and Visiting Lecturer Royal College of Art furniture department; he is at presently Visiting Professor of Design & Innovation at Bristol Robotics Lab and Designer in Residence at the University of Sheffield's engineering faculty.

# Zahid Ghadialy, Parallel Wireless UK & EMEA @zahidtg Profile above.

## Christina Georgiou, PA Consulting @nefeli\_ge

Christina is a roboticist with experience in research, design and delivery of algorithms and software for intelligent machines. During her PhD in robotics at Sheffield University she designed and implemented novel computer vision and mapping algorithms to help robots map areas more accurately. Christina has also developed visual feature detection and autonomous movement algorithms for Unmanned Aerial Vehicles during her MEng research at the University of Cambridge. At PA she has led development of computer vision algorithms and software for real time, high speed production line inspection, human-machine collaboration to map challenging environments and agricultural field inspection. She has delivered software verification and validation of complex robotics systems, designed algorithms to analyse low quality sensor data and has written reports for the UN on the technical challenges and future for robotics and UAVs. <a href="https://www.paconsulting.com">www.paconsulting.com</a>

#### **Cécile Pacoret**

Cecile Pacoret, Ph.D., is a researcher in robotics and neurosciences, founder of a start-up project: Periscopeneurotech and teacher of psychomotor therapists. <a href="www.unige.ch">www.unige.ch</a>