

Future Devices & Technologies SIG webinar '6G devices of 2030'

12th January 2021

The Future Devices & Technologies SIG is championed by Graham Anderson of **Beko**, Nadia Aziz of **Unbounded Future**, Esther Ford of **Marks & Clerk**, Zahid Ghadialy of **Parallel Wireless UK & EMEA**, David Roberts of **Jabooh Software**,

Charles Sturman of Huawei Technologies Research & Development (UK)

| AGENDA | |
|--------|--|
| 11:00 | CW welcome, Simon Mead, CEO, CW (Cambridge Wireless) |
| 11:05 | Introduction to Future Devices & Technologies SIG by Esther Ford, Future Devices & Technologies SIG Champion and Partner, Marks & Clerk |
| | Session to be chaired by Esther Ford, Future Devices & Technologies SIG Champion |
| 11:10 | 'The Journey Towards 6G' |
| | Magnus Frodigh, VP & Head of Ericsson Research, Ericsson |
| | During the coming years towards 2030, we will have a very strong technology development coinciding with the rollout of the 5G networks. In the talk I will present our view on the driving use cases we see in front of us. In parallel to the development on the use cases we will see the evolution of the 5G network platform. The gap between the needs of the use cases and the capability of the platform, together with the availability of new technologies, will define the 6G systems. |
| 11:25 | Q & A |
| 11:35 | 'Mapping the Evolution to 6G-Centric TeraEconomy!' |
| | Neil Shah, Partner and Vice President of Research, Counterpoint |
| 11:50 | Q & A |
| 12:00 | 'Limitless Imagination vs Technology Limitations' |
| | Zahid Ghadialy, Senior Director, Technology & Innovation Strategy, Parallel Wireless |
| | This talk will look at the science fiction scenarios that 5G promises, which expectations are being set |
| | for 6G and what we may realistically be able to deliver in 2030. |
| 12:15 | Q & A |
| 12:25 | Closing speech & remarks, Esther Ford, Future Devices & Technologies SIG Champion |
| 12:30 | End of session followed by networking |
| 13:00 | Event closes |
| | |

With the permission of the speakers, presentations will be loaded to the CW website on the day 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. www.cambridgewireless.co.uk

Profile of SIG champions

Graham Anderson, Beko

Graham Anderson is Senior Specialist at Beko R&D, with research interests focused around novel sensors, data analytics, and energy storage/harvesting. Previously he worked as a Senior Scientist at Cambridge Display Technology working on the development of ink jet printed OLED displays and organic thermoelectric generators. Graham has a PhD from Leeds University in spintronics. www.beko.co.uk

Nadia Aziz, Unbounded Future

Nadia is an emerging technology consultant with heavy focus on AR/VR & new technology areas. She has a broad experience over 12 years as an engineer, programmer, consultant, advisor, speaker, IP scouting and has a passion for emerging technologies and its impact on business transformation. She has also helped in mergers & acquisition programmes in France specifically in the engineering areas. Nadia Aziz was recently an Innovation leader for Emerging Technologies at NTT DATA where she led the development of innovation applications in Augmented (AR) & Virtual Reality (VR)technologies, AI, sensors and wearables. She is active in the Digital Health community and was a co-producer for the GIANT Health Event in 2018.

Esther Ford, Marks & Clerk

Esther obtained an MEng in Electronic Engineering after studying at the University of Kent and the Technische Hochschule Darmstadt. Having been awarded an Engineering Prize from the Royal Academy of Engineering, she went on to obtain a PhD in Microelectronics from the University of Cambridge. During her research, Esther developed a nanodot array single electron device with controlled threshold voltage at high temperatures. She also presented the Institute of Engineering and Technology (IET) Faraday Lecture "The Digital World", which was delivered to live audiences throughout the UK and broadcast over Europe and North America, reaching an audience of 20,000. After completing her PhD, Esther worked as a research engineer in Nortel Networks and subsequently in a telecommunications design consultancy. She joined the patent profession in 2004 and has extensive experience in managing international patent portfolios. She also has significant experience representing clients at the EPO in oppositions and appeals. Esther joined Marks & Clerk in 2008, and in 2011 enjoyed a secondment as an in-house attorney for a valued client in the Oil/Gas industry. Her recent focus has been in the fields of Internet Service Provision, Oil/Gas recovery, Power Electronics, and the Internet of Things. Esther has been recognised as a rising star by Managing Intellectual Property, IP Stars, 2017. www.marks-clerk.com

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. www.parallelwireless.com

Dave Roberts, Jabooh Software

David is a technology leader with over 25 years' experience working in the hi-tech arena. He has recently completed a successful project for ghd in conjunction with CW where he carried out the role of System Architect and facilitator. Prior to this he worked in in the C-IoT space where he ran a multi-national R&D department that developed silicon and software designed for the burgeoning IoT market. He was also responsible for driving an agile transformation programme and assisting the organisation with their integration into a large Chinese multi-national telecoms company. Having started his career as a software developer working for BT and Acorn Computers, he went on to hold senior roles in a number of world-class organisations such as Symbian, Cambridge University and Citrix in the areas of Software Development, Project Management, Product Management, Research, Consultancy and Architecture. His background includes leading and developing teams involved in the creation of large-scale integrated hardware and software products, web-based services and CE devices. He is also highly experienced in large-scale agile development practices, agile coaching/transformation and creating and executing strategies for increasing the efficiency and effectiveness of organisations.

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 led u-blox's activities in the fast-moving consumer IoT segment (wearables, smart-home and entertainment) following the acquisition of the ARM Software Radio spin-out Cognovo, where we was 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. www.huawei.com

Speakers

Magnus Frodigh, Ericsson

Dr. Magnus Frodigh has been Vice President and Head of Ericsson Research since 2018. Dr. Frodigh was Research Area Director for Network Architecture and Protocols at Ericsson Research from 2007 to 2018 with responsibility for driving long-term technology leadership research in the areas of network architecture and protocols comprising radio, transport and core networks, including network management.

www.ericsson.com

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Neil Shah, Counterpoint **@neiltwitz**

Neil is a Partner & Vice President, Research at Counterpoint Research and a sought-after frequently-quoted Industry Analyst, keynote speaker and regular part of the jury panel for multiple premier tech industry awards. He is a knowledgeable, adept, and accomplished strategist covering mobile, telecom and technology sectors with a wide spectrum of rich multifunctional industry experience. In the last 15 years, he has offered expert strategic advice that has been highly regarded across different industries especially in telecom. Prior to Counterpoint, Neil worked at Strategy Analytics as a Senior Analyst (Telecom). Neil also had an opportunity to work with Philips Electronics in multiple roles. He is also an IEEE Certified Wireless Professional with a Master of Science (Telecommunications & Business) from the University of Maryland, College Park, USA.

www.counterpointresearch.com