User Experience SIG
'Prototyping experiences:
Projects using open source hardware to better predict innovation outcomes'

16 December 2015

Sponsored by **ANSYS®**

This SIG is championed by Stefano Borini of **Nokia Technologies**, Giuliano Maciocci,
Allan MacLean of **Amdeo**, Geoff McCormick of **Alloy** and David Walker of **Philips Research Laboratories**.

Trinity Hall, Trinity Lane, Cambridge, CB2 1TJ

AGENDA

13:30	Registration and networking with refreshments
14:00	Introduction to the User Experience SIG from **Geoff McCormick, Alloy**
14:10	Welcome from sponsor, **Andrew Jones**, Regional Sales Manager for Electronics Business, **Ansys UK**
	Session chaired by SIG Champion, Stefano Borini, Nokia Technologies
14:20	**Innovation at Google and Ubiquitous Computing** **Hoi Lam,** IoT Developer Advocate, **Google** What is the future of computing? Hoi will share his thoughts on the future and some of the product development lessons along the way at Google.
14:40	Q&A
14:45	**Dementia Badge – Assisted Living for People with Cognitive Decline** **David Walker**, Senior Scientist, **Philips Research Laboratories** A prototype of a wearable device that helps people with cognitive decline to perform their Activities of Daily Living (ADL) and hence remain independent and stay at home for longer.
15:05	Q&A
15:10	**Invent your own Internet of Things** **Joachim Horn**, CEO, **SAM Labs** This talk investigates how the Internet of Things (IoT) will impact innovation. Meet SAM, a disruptive IoT technology kit, with an unrivalled approach to instantly inventing your own smart objects while learning about electronics and engineering.
15:30	Q&A
15:35	Panel session chaired by **SIG Champion, Giuliano Maciocci, eLife Sciences**
16:10	**Refreshments and networking**
	Session chaired by SIG Champion, David Walker, Philips Research Laboratories
16:40	**Building a Living Lab – insights & ideas generated by embedding connected sensors into our daily lives** **Chris Huggins, Tom Gantzer,** Interaction Designers, and **Chris Ward,** Developer, **Alloy** Alloy Team members will outline their experience of building a series of hardware prototypes, created to explore and predict user experiences relating to a 'Connected Lifestyle'. We will share a series of experiments we have undertaken, and how they relate to the development of more compelling offers in IoT.
17:00	Q&A
17:05	**Internet of Paper** **Kate Stone**, Managing Director, **Novalia** Adding touch, connectivity and data to pieces of paper.
17:25	Q&A
17:30	Panel session chaired by **SIG Champion, Allan MacLean, Amdeo**
18:00	**Event close and complete feedback survey**

Delegates are invited to attend the Founder's Dinner pre-dinner drinks, taking place at Trinity Hall

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

Organisers

CW (Cambridge Wireless)

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 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 the annual Future of Wireless International Conference and Discovering Start-Ups competition 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. For more information, please visit www.**cambridgewireless**.co.uk

Sponsor

Ansys UK

Our world is more connected than ever, thanks to the growing web of visible and unseen electronics that surround us every day. The high-tech industry is investing in developing wearable electronics, 5G wireless networks, and quantum computing to power the Internet of Things (IoT). To fully realize the vision of IoT, engineers are addressing key challenges in data security, power management and high-speed communications, to name a few. ANSYS provides the comprehensive suite of simulation software to reliably and cost-effectively engineer high-performance electronic devices and systems.

RF and microwave system design engineers rely on ANSYS electromagnetic simulation software to conduct high-fidelity 3-D EM simulations, analyse geometric-scale variations, perform thermomechanical stress analysis and optimize antenna design. The integrated workflow enables you to rapidly conduct design trade-offs, resulting in improved range, reliability, and data throughput.

More than 40,000 customers world-wide use our software from a wide range of industries, including aerospace, automotive electronics, energy, materials and chemical processing, turbomachinery, academia, civil engineering, consumer products, healthcare, sports, and others.

Engineering simulation is our sole focus. For more than 40 years, we have consistently advanced this technology to meet evolving customer needs. For more information, please visit www.**ansys**.com

SIG Champions

Stefano Borini, Nokia Technologies

Stefano Borini is a Research Leader at Nokia Technologies in Cambridge, working at the development of novel materials and technologies for future connected devices and sensors, with a main focus on nanotechnology. Stefano holds a Master degree in Physics from University of Turin and a PhD in Materials Science and Technology from Polytechnic of Turin. For more information please visit www.**nokia**.com

Giuliano Maciocci, eLife Sciences

Giuliano is a User Experience specialist with an established track record in wearable devices, augmented reality and natural user interfaces. Giuliano's extensive portfolio encompasses web, mobile application and embedded software interfaces for a variety of market leaders in the wireless industry, from helping to shape Europe's first 3G mobile offerings to spearheading Qualcomm's Head Mounted Display research initiatives. Currently at eLife Sciences, Giuliano's current focus is on championing user-centred innovation and research, helping to steer the evolution of scientific publishing. For more information please visit **elifesciences**.org

Allan MacLean, Amdeo

Amdeo specialises in the development and exploitation of high tech innovations. Amdeo principal, Allan MacLean, has worked in research and management roles at the leading edge of Information and Communication Technologies for over 25 years. He was a founder member of Xerox's European Research Centre in the 80's and was a major contributor to building it into one of the world's leading centres of expertise in the user centred design of innovative technologies. In 2002, he co-founded Image Semantics, which he helped lead to become a global provider of innovative mobile applications and services. Allan has frequently advised on funding programmes in the UK, Europe and North America to help improve the fit between technologies and human needs and improve the exploitation of government funded research.

Geoff McCormick, Alloy

Geoff has worked as a business consultant in the design industry for over 10 years. In that time he has worked with some of the world's most famous and successful designers, where his role was to help designers, companies and brands to try and maximise the commercial effectiveness of design.

His experience covers every populated continent and a diverse range of sectors, including developing a mobile petrol retail station, an interior design system for VIP aircraft, hydrogen powered vehicles, packaging strategies for FMCG brands and innovation programmes utilising Asian sourcing. It is this breadth of experience that he values most. Common across all of his clients and projects is the desire to create truly unique experiences that occupy a space in peoples' hearts and minds. For more information please visit www.**thealloy**.com

David Walker, Philips Research Laboratories

David is a Senior Scientist with Philips Research Labs. David has worked on a variety of projects beginning over 25 years ago with expert systems for compact disc based multimedia systems. He went on to work on projects for Philips Consumer Communications and first generation internet browsers for cell phones. This included the development of novel mobile applications for education and entertainment. More recently David has worked on home healthcare and developed next generation telehealth and telecare systems. And all these interests are now brought together with participation in projects in mobile health monitoring. Throughout his career David has pushed for user centered design and delivered systems that are sensitive to the needs and abilities of the end user. He is especially interested in novel technologies that can improve the user experience and is currently exploring use case scenarios for NFC (Near Field Communications).
For more information please visit www.**research.philips**.com

Speakers

Tom Gantzer, Alloy

Tom graduated with a 2.1 from Loughborough University in 2013, having studied Industrial Design & Technology. His strong technical capabilities enabled him to gain a placement at GE working in their Oil & Gas business, where he helped to express the brand for the pressure sensing business unit. He quickly gained experience of designing a diverse range of industrial sensing products, including portable calibrators and aircraft pressure sensors.

His strong belief in a more integrated approach to the design of physical & digital experiences, means he has spent considerable time building his knowledge of digital tools & platforms, applied this to solving digital challenges, closely mirroring Alloy's own philosophy and approach. For more information please visit www.**thealloy**.com

Joachim Horn, SAM Labs

Joachim Horn, founder of SAM Labs, has transformed the complicated process of creating smart devices by empowering anyone to become an instant innovator. A mechanical engineering graduate and co-founder of the Imperial College Design Collective, he fused his passion for design and tech to develop SAM Labs. SAM is the world's most engaging Internet of Things toolset that lets you become the inventor. For more information please visit **samlabs**.me

Chris Huggins, Alloy

Chris gained a 1st class Master's Degree in Product Design from the University of Leeds. Chris previously worked in consumer electronics design, where he discovered that, to him, the interface was far more interesting than the hardware. Since joining Alloy, Chris has become a key member of the Alloy interaction team developing and delivering a wide variety of interaction design projects for Grass Valley, our start-up Well Together, and other clients. His Industrial Design training combined with his intellectual curiosity means he helps us to continually explore new platforms and tools. For more information please visit www.**thealloy**.com

Andrew Jones, Ansys

Andrew Jones joined ANSYS in 2006 and is currently the Head of Commercial operations for the Electronics business unit at ANSYS UK Ltd. Andrew's role has been in the development of a platform for all of its software prototyping simulation tools encompassing solutions for M2M & Internet of Things related products.

Prior to joining ANSYS, Andrew has worked in several technical positions as well as a number of management positions at ANSYS and for companies such as Cadence Design Systems, OrCAD UK Ltd and Harris EDA Ltd. For more information please visit www.**ansys**.com

Hoi Lam, Google

Hoi is a subject matter expert at Google for Wearables and Internet of Things (IoT). He worked on the launch of Google Cast / Chromecast in Europe, Android Wear, Google Glass and the Google beacon platform. Looking forward, he is responsible for the launch of Brillo and Weave - Google's IoT operating system and communication protocol. Prior to joining Google, he founded Exahive to disrupt the mobile commerce marketplace with new technology and business models. Hoi was an Equity Research VP at Deutsche Bank and Citigroup between 2007-2012 advising technology CEOs, CFOs on corporate strategy and institutional investors on technology investments.

Before banking, he was an enterprise architect at Accenture heading up product management for large client programmes. Hoi holds a Master and Bachelor degree in Space Engineering from the University of Cambridge. For more information please visit www.**google**.co.uk

Kate Stone, Novalia

I am passionate about print and adding interactivity to everyday things.

As a child I pulled my toys (or my siblings' toys!) apart to see how they worked.

I took a degree in Electronics, and a PhD in Physics at Cambridge University; I founded Novalia to explore the space where traditional print and conventional electronics converge and have been living in that world ever since.

The deeper I explore the space, people join my team and companies start to work with us, the more I begin to see that the future looks & feels more like the past than the present, an analogue physical world with digital DNA. For more information please visit www.**novalia**.co.uk

David Walker, Philips Research Laboratories

See SIG profile above.

Chris Ward, Alloy

Chris learnt his digital craft and technical skills at Airborne Interactive developing In-Flight Entertainment systems for Singapore, Delta and other leading airlines.

Since joining Alloy, he has deployed his expertise with AngularJS, jQuery, Qt, QML and other frameworks / platforms to deliver ever more compelling digital solutions to our clients' innovation challenges. His skills are in constant demand, and he handles this with the serenity of a swan. For more information please visit www.**thealloy**.com