

## The Artificial Intelligence SIG

### 'ML Gotcha" - heroic stories from deploying commercial machine learning applications'

15<sup>th</sup> February 2018

Sponsored by GeoSpock and hosted by The Bradfield Centre, Cambridge Science Park

The Artificial Intelligence SIG is championed by Laurent Brisedoux of **Amazon**, James Chapman of **Qualcomm**, Phil Claridge of **Mandrel Systems**, Gunter Haberkorn of **Magna International** and Peter Whale of **Peter Whale Consulting**

Wifi: Central Working Members **Password:** Ca3Br1d5e

#### AGENDA

**17:30** Registration

**18:00** Introduction to Artificial Intelligence SIG, **Bob Driver, Chief Executive Officer, CW (Cambridge Wireless)**

**18:10** Welcome from event sponsor, **Dr Steve Marsh, Founder and CTO, GeoSpock**

**18:20** **Session chaired by Artificial Intelligence SIG Champion, Phil Claridge**

**'Chatbots? garbage in garbage out'.**

**Leo Poll, President, Akendi**

The last 5 years have been nothing short of a revolution in speech, natural language interpretation and AI. All the tools are there (e.g. IBM Watson) to get a chatbot up and running quickly. However, embedding common sense as well as some form of social skills to a chatbot is not a quick and easy job. During this talk Leo Poll will share Akendi's experience with developing a chatbot that was intended to be a more accessible alternative to our FAQ's on our website (which nobody reads). The internal code name for this project was 'Botterik' which is Dutch for somebody who is a bit short and rude. Ensuring that Akendi's chatbot no longer deserved this nickname is not an easy and quick job despite the effectiveness of the AI toolkit.

**18:50** Q&A

**Session chaired by Artificial Intelligence SIG Champion, Phil Claridge**

**18:55** **'Where can I park my car?'**

**Mary-Ann Claridge, Founder & Lead Data Scientist, Mandrel Systems, supported by Phil Claridge, Mandrel Systems**

Real world end-to-end examples of machine learning using Smart City data. We will demonstrate where you might want to try and park your car in Cambridge. From raw data to working application in under 20 min? As part of the demonstration we will discuss major issues we find in introducing AI and ML to commercial consulting customers. This session is a counterpoint to the previous AI/Open source SIG event as some of the tools showcased will be closed source (free to use) that have significant consulting revenue opportunity.

**19:25** Q&A

**19:30** **Panel Q&A with all speakers chaired by Artificial Intelligence SIG Champion, Phil Claridge**

**19:45** **Refreshments and networking**

**20:45** **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) @cambwireless**

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 20 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](http://www.cambridgewireless.co.uk)

## Profile of host

### **The Bradfield Centre and Central Working @BradfieldCentre @centralworking**

The Bradfield Centre is a collaborative entrepreneurial community of technology start-ups and scale-ups at the heart of the Cambridge Science Park. The new Centre is expected to become the gateway and focal point for Cambridge's ever-expanding technology cluster. The Centre is the largest of Central Working's global network of rapidly expanding membership-based communities.

[www.bradfieldcentre.com](http://www.bradfieldcentre.com) [www.centralworking.com](http://www.centralworking.com)

## Profile of sponsor

### **GeoSpock @GeoSpock**

GeoSpock is an extreme-scale, data integration platform specifically designed to handle the unique data processing demands of fully integrated smart cities. Current technology hits its real-time analysis limitation at less than a billion data points requiring users to choose a restricted subset of their data thereby placing both big picture and granular insights out of reach. Smart data platforms typically ingest many billions of data inputs a day, breaking existing tools and creating increasingly complex data analysis challenges. Our team of over thirty Cambridge-based engineers is focused on solving these problems for a future where understanding the relationship between millions of constantly moving, mobile assets (e.g. cars, ships, mobile phones) is crucial to the efficient operation of our physical environments. GeoSpock's infin8 engine has been built to handle machine generated ingest rates of 15,000,000 updates per second. To put this into perspective, the human-generated data indexing and analysis engine at the heart of Google Search handles around 50,000 queries per second. Our high-performance map display and filtering tool, illumin8, can be easily combined with an organisation's own custom business analytics, to produce powerful predictive dashboards. The core technology was inspired by Dr. Steve Marsh's PhD research at the University of Cambridge, where he designed and built a custom super-computer architecture to carry out real-time simulation of human brain function. [www.geospock.com](http://www.geospock.com)

## Profile of Artificial Intelligence SIG Champions

### **Laurent Brisedoux, Amazon @AmazonUK**

Laurent Brisedoux has been heading the Amazon R&D team in Cambridge, part of the Lab126 organization, since its creation in 2014. His group is responsible for developing application, device and cloud software for Amazon's consumer electronic devices such as Kindle, Fire tablets, Fire TV, Dash, Echo and many more innovative products to come. Prior to that, Laurent was in charge of the development and productisation of imaging technologies at Broadcom, managing a group of 50 people across multiple locations worldwide. He joined the Broadcom Mobile Multimedia group in 2004 with the acquisition of Alphamosaic, one the Silicon Fen 'success stories'. Laurent is also a junior angel investor and working with several technology start-ups in the Cambridge area. [www.amazon.com](http://www.amazon.com)

### **James Chapman, Qualcomm**

James is Qualcomm's VP responsible for its roadmap of Voice & Music products. Before joining Qualcomm as part of the acquisition of CSR, he was responsible for CSR's connectivity product line. Prior to CSR James has held senior software management roles at Broadcom; he was also the Head of Research for TTP Communications. James' 20 years in the high-tech industry started with a degree and PhD in theoretical Condensed Matter Physics from the University of Oxford. [www.qualcomm.com](http://www.qualcomm.com)

### **Phil Claridge, Mandrel Systems @MandrelSystems**

Phil Claridge is a 'virtual CTO' for hire within Mandrel Systems covering end-to-end systems. Currently having fun and helping others with large-scale AI systems integration, country-wide large scale big-data processing, hands-on IoT technology (from sensor hardware design, through LoRa integration to back end systems), and advanced city information modelling. Supporting companies with M&A 'exit readiness', due-diligence and on advisory boards. Past roles include: CTO, Chief Architect, Labs Director, and Technical Evangelist for Geneva/Convergys (telco), Arieso/Viavi (geolocation), and Madge (networking). Phil's early career was in electronics, and still finds it irresistible to swap from Powerpoint to a soldering iron and a compiler to produce proof-of-concepts when required. [www.mandrel.com](http://www.mandrel.com)

### **Gunter Haberkorn, Magna**

Profile to follow. [www.magna.com](http://www.magna.com)

### **Peter Whale, Peter Whale Consulting @Peter\_Whale**

Peter is a technologist and business leader, with a long track record of conceiving, developing and marketing successful technology-based solutions, which have touched the lives of many millions of people. Currently exploring transformative possibilities in AI, IoT and future connected devices. Peter is co-author of the 'Essentials of Mobile Handset Design', published by Cambridge University Press. Peter is a board member of Cambridge Wireless, and is a champion of the CW Artificial Intelligence SIG. [www.peterwhale.com](http://www.peterwhale.com)

## **Profile of speakers**

### **Mary-Ann Claridge, Mandrel Systems @MandrelSystems**

Mary-Ann is the Lead data scientist at Mandrel Systems. Started her career with research into sonar (think Hunt for Red October without Sean Connery). Now embracing application and technical domains including education (all the analysis, modelling and visualisation for BestCourse4Me), smart city, retail, voice and speech recognition, and financial and logistical optimisation. [www.mandrel.com](http://www.mandrel.com)

### **Phil Claridge, Mandrel Systems @MandrelSystems**

Profile above (Artificial Intelligence SIG Champion) [www.mandrel.com](http://www.mandrel.com)

### **Steve Marsh, GeoSpock @GeoSpock**

Steve is a technology entrepreneur who graduated from Cambridge University with a PhD in Computer Science, where he built custom super-computer architectures for real-time simulation of human brain function. It was his PhD research that inspired GeoSpock's revolutionary technology. Steve is an alumnus of the Techstars Winter 2014 cohort in London and a member of Forbes' 30 under 30. He is also a past winner of Information Age's UK Data Entrepreneur of the year and an affiliate on TechCity's Upscale programme for high-growth businesses. [www.geospock.com](http://www.geospock.com)

### **Leo Poll, Akendi @Akendi\_UK**

Technically everything is possible, making it work for people is where the real challenges are. Addressing these challenges from an end-user perspective in a way that makes business sense is what drives Leo. With more than 20 years of experience in Innovation driven Experience Research and Design he is able to bring an ability of strong lateral thinking combined with broad domain knowledge of applications/markets and technical enablers. Previous to his role at Akendi, Leo worked for the mobile phone division of Philips in Le Mans, France, managed numerous international projects whilst employed by Philips Electronics UK, was a member of the global 'Connectivity Programme' board of Philips Research, (Co-)founded Ryppel Ltd, Eversfield Innovation Ltd, Galileo Software Adviesbureau v.o.f [www.akendi.co.uk](http://www.akendi.co.uk)