

FIVE

A joint event from the Software/Open Source and Artificial Intelligence SIGs 'Open Source AI tools – a look under the hood'

23rd November 2017

Hosted by The Bradfield Centre, Cambridge Science Park and sponsored by FiveAI

The Software/Open Source SIG is championed by John Bechtel of **Badger Pass**, Phil Burr of **Arm** and David Roberts of **Jabooh Software**

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

Venue: The Bradfield Centre, 184 Cambridge Science Park, Milton Road, Cambridge, CB4 0GA

AGENDA	
17:30	Registration
18:00	Introduction to Software and Artificial Intelligence SIGs, Abhi Naha, Chief Commercial Officer, CW (Cambridge Wireless)
18:10	Session chaired by Software SIG Champion, David Roberts, Jabooh Software
	'Training neural networks using Tensorflow' Lars Mennen, Software Engineer, FiveAI
	We'll look in depth at how neural networks work and how you train them, in particular using Google's open-source toolkit Tensorflow. Besides writing and training a network live, we will also have a look under the hood of Tensorflow and explain all the important concepts you need to know to work and develop with Tensorflow. Keep your laptops with Python ready to code along!
19:10	Q & A
	Session chaired by Artificial Intelligence SIG Champion, Phil Claridge, Mandrel Systems
19:15	'ML LAId bare'
	Phil Claridge, Founder, Mandrel Systems
	This talk is a personal perspective on a number of Open Source AI and Machine Learning solutions. I will walk through a few appropriate tools for different problem domains including solutions for those starting in AI, those wanting a quick visual perspective, and emerging tools for people looking for a challenge.
19:40	Q & A
19:45	Panel Q & A with speakers chaired by SIG Champion, David Roberts, Jabooh Software
20:00	Refreshments and networking
21:00	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 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

Profile of host

The Bradfield Centre and Central Working

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.centralworking.com/locations/cambridge

Profile of sponsor

FiveAI @_FiveAI

We're building the world's most reliable autonomous vehicle software stack to solve the most difficult problem of all - delivering a solution that's safe in complex urban environments, without any driver involvement. That's defined as the top level in autonomy - 5. www.five.ai

Profile of Software/Open Source SIG Champions

John Bechtel, Badger Pass

John Bechtel is the founder of Badger Pass, a consultancy supporting small Internet of Things technology companies. His extensive international experience in Canada, the UK, Europe, Japan and Australia in start-ups, medium-sized and large organisations includes a range of senior management functions from engineering to sales to product management to managing director. He has worked on Hypercat and Weightless, and is a Cambridge Wireless SIG champion in software and open source. John holds a Bachelors degree in Systems Design Engineering from the University of Waterloo in Canada, attended Henley Management College MBA school, and is a certified PRINCE2 project management Practitioner. www.badgerpass.co.uk

Phil Burr, Arm Ltd

Phil, as a senior product manager, has grown product revenue by focusing on the customer. Covering product strategy, product marketing, business development and product management, Phil is driven by the desire to connect customers to products that delight. Most recently Phil was Product Marketing Director at Arkessa (IoT SaaS platform) and Senior Product Marketing Manager at Mentor Graphics (embedded software product). Phil cofounded Octymo, a Cambridge start up focused on licensing a mobile phone applications platform. Phil brings extensive global experience including living in Asia where, for TTPCom and Motorola, he built and led a pan-Asian division to service multi-million dollar contracts. www.arm.com

David Roberts, Jabooh Software

David is a technology leader with over 25 years experience working in the hi-tech arena. David is currently working at Five.ai, a Cambridge-based SME that is building the world's most reliable autonomous vehicle software stack where he is putting in place the organisation, process, tools and frameworks required to meet this ambitious vision. 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.

Profile of Artificial Intelligence SIG Champions

Laurent Brisedoux, Amazon

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

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

Phil Claridge, Mandrel Systems

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

Gunter Haberkorn, Magna

Profile to follow. www.magna.com

Peter Whale, Peter Whale Consulting

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

Profile of speakers

Lars Mennen, FiveAI @_FiveAI

Lars Mennen works as a software engineer on algorithms and machine learning at autonomous vehicle start-up FiveAI. He holds a MASt in Pure Mathematics from the University of Cambridge and is a graduate in Knowledge Engineering from Maastricht University. www.five.ai

Phil Claridge, Mandrel Systems

Profile above (Artificial Intelligence SIG Champion) www.mandrel.com