ACS Canberra Branch 2016 Annual Conference **Drones, Droids and Robots**

Tuesday, 23 August 2016, National Convention Centre #acscancon @acscanberra

Welcome messege



Dr. Tim Turner Chairman of ACS Canberra

"Danger, Will Robinson! Danger! Danger!"

Not exactly my first memory of a robot (I think the Daleks have that honour), but perhaps my first memory of a robot helping a human out. Or was it Rosie, the house maid in the Jetsons? Anyway, the idea of helpful robot servants has been around for a long time! The theme for this year's ACS Canberra Branch Annual Conference is "Drones, Droids, and Robots", which we've adopted from the National Science Week theme.

We've compiled a list of great speakers who are going to talk about how robots, automation, machine learning and artificial intelligence will be influencing our work and professional lives now and into the future. Within the conference we'll look at questions

like: what should we be teaching our children

about what it means to work? How is leadership changed by an automated and possibly autonomous workforce? What issues must we consider when attempting to build systems that are expected to run unsupervised?

Photo: Supplied

Our gala conference dinner will be worth staying on for too. We'll be hearing from our Chief Minister and also recognising the significant and special contributions that have been made by IT professionals in the ACS in Canberra over a long period of time.

I hope that through hearing what these industry and thought leaders think about a more automated future, we will all not have to rely on our 'friendly automaton' protecting us as the robot in Lost In Space did for Will Robinson all those years ago.

professionalism and ethics in the technology field.

As we rely more than ever before on autonomous systems for protection, we must be assured that those professionals designing and creating systems are doing so in a manner which keeps the public interest at the forefront. As the professional association for Australia's ICT sector the ACS has a leading role to play in promoting and defining professionalism in ICT.

By attending the ACS Canberra Conference, you are indicating that you are willing to be a part of shaping the future not only of our profession, but also of our country. I want to thank you for joining us as we undertake this important work, and I look forward to meeting you at the 2016 ACS Canberra Conference.



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Drones and robots courtesy of Greg Farrugia - Photo: Kasra Yousefi



Photo: ACS



Anthony Wong

On behalf of the ACS I would like to take this opportunity to welcome delegates to the 2016 ACS Canberra Conference. For a number of vears our Canberra Branch has hosted this event which brings together delegates from all over the country to discuss issues of importance to our profession, and this year is no different.

The conference theme of Drones, Droids and Robots is fitting given the increasing prevalence of autonomous technology in society. Earlier this year I was able to attend the Consumer Electronics Show in the USA and wrote at the time that cars are rapidly becoming computers on wheels. With these developments it becomes imperative to discuss the importance of

Programs Conference - Tuesday, 23 August 2016

	Confer	Conference - Tuesday - 23 August 2016 - Drones, Droids and Robots						
AM PM	8:30	8:30 9:00 Arrival Tea & Coffee						
	9:00	9:05	Conference opening (Ballroom) - Conference Chair, Dr Tim Turner					
	9:05	9:25	Conference Address (Ballroom) - Data Fuels Innovation and the Digital Economy; But who owns and controls Data? Anthony Wong - President, Australian Computer Society					
	9:25	10:15	Plenary Keynote (Ballroom) - Drones, Droids and Robots - Which one are you? - Jon Cumming - Chief Digital Officer, ACT Government					
	10:15	10:35	Tea & Coffee Break and Exhibition (Gallery Foyer)					
	10:35	11:15	Security (Derwent Room)	Leadership (Fitzroy Room)	Education (Murray Room)	The Future of Work (Swan Room)	Data Management (Torrens Room)	
			Security leadership	Rise With The Machines	The art of the possible	Nano-satellites Space Constellation	Data Quality matters for machines too!	
			James Turner	Zoe Routh	Dr Maria Milosavijevic	Flavia Nardini	Chris Bradley	
	5 Min	nutes	Change over					
	11:20	12:00	Security and Privacy in Social Media Networks	The New IT leader	STEAM the sport of robotic competitions	Drones as a service	Even drones need privacy	
			Ambarish Natu	Gill Savage	Chris Hamling	Mark Stevens	Glen Bell	
	12:00	12:40	Lunch (Gallery Foyer)					
	12:40	1:30	Plenary Keynote (Ballroom) - DDR, IWAR, HIoT – what more do you need to know? Dr Trish Williams -CISCO Chair and Professor of Digital Health Systems, Flinders University SA					
	5 Minutes Change over							
			Professionalism (Derwent Room)	Leadership (Fitzroy Room)	Education (Murray Room)	Analysis and Design (Swan Room)	Data Management (Torrens Room)	
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Post-Conference Workshops – Wednesday 24, Thursday 25 and Friday 26 August 2016, contact DAMA Management on 0414 911 923 or President.canberra@dama.org.au

Conference Plan



FIRST FLOOR

Conference Facilities

Disabled Facilities: All public areas of the Convention Centre are accessible by wheelchair. Lifts are located in the foyers and provide access to both levels of the Convention Centre, and to the top level of the car park.

Toilets: Male and female toilets, including disabled access toilets are located in the foyers on both levels of the Convention Centre. Smoking: The National Convention Centre is a smoke free venue. Smoking is not allowed inside the building. Wireless: Wireless Internet is available free to conference delegates

Streams

Overall Theme

The conference theme of Drones, Droids and Robots is drawn from National Science Week. It's application to our conference focuses on drones, droids and robots and also wraps up ideas like automation, machine learning and artificial intelligence, sensors and the internet of things, the data that arises from those sensors and autonomous machines and its analysis. We also explore the ethical issues around machine learned decision making and the behavior of autonomous machines.

The streams that arise within this broad scope are:

- **Security** to what extent can we rely on automated/autonomous machines for security and what threats to autonomous/ automated machines pose to our IT infrastructure?
- **Professionalism** what are the ethics of setting autonomous machines to participate actively in our society?
- The Future of Work how will our jobs change as machines and autonomous software agents perform more and more of the 'routine' elements of all jobs?
- **Analysis and Design** to what extent are classical methods of understanding requirements for (work) systems changed by the introduction of automated entities in the workforce/work systems?
- **Data management** automatons and sensors generate unimaginable amounts of data constantly. How do we cope with that data burden?

- **Leadership** Are we heading to a future where teams of people are led by robots/autonomous entities?
- Education how can drones, droids, and robots be used as a part of the educational process? What do people need to know to be able to create, maintain, use and optimize the exploitation of (autonomous) drones, droids and robots?



Sponsors - Gold





Callida Consulting is a rapidly growing Canberra-based consultancy firm with over 60 experienced consultants dedicated to providing independent and professional services to the public sector in the areas of ICT consulting, financial management, assurance and audit, and management consulting.

Our success is underpinned by our corporate values that enable us to focus on delivering quality outcomes for our clients and developing and supporting our consultants. We have assisted a number of agencies to measurably increase value from their ICT investment, and to manage the change associated with ICT-enabled projects. As a Department of Defence employee you will enjoy experiences that, as a civilian, you simply wouldn't find with any other organisation. You will work with a diverse group of women and men who are dedicated to protecting Australia and our national interests, carrying out work that has true purpose. We offer opportunities for work across the career spectrum including graduate, internship, cadetship, traineeship, undergraduate sponsorship and work experience placements. See our website for more information http://www.defence.gov.au/graduates/

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Take your career to the next level with IT training from Canberra Institute of Technology, the region's premier and largest vocational education and training provider. CIT offers courses for all skill levels in areas including software development, games programming, systems analysis and design, testing, networking, cyber security and CISCO certification.



UNSW has been proudly educating the future leaders of the Australian Defence Force here in Canberra for half a century. UNSW Canberra is a multidisciplinary college with undergraduate and postgraduate coursework programs and research available in Business, Management, IT, Engineering, Humanities, Science and other areas.



The Research School of Computer Science at ANU believes in the power of computing technologies to help solve diverse problems and transform industries. Our education and research programs combine knowledge and understanding of computer science and technology alongside experiential learning. Students are accredited through the ACS upon graduation.



The University of Canberra is a high-growth, emerging university that values innovation and collaboration. It is a university with a global focus and strong international links, including partnerships with universities around the world. The University has strong emphasis on work-integrated learning and produces some of the country's most employable graduates.

Exhibition booth





SMF