Perth Big Data Week 2016 Events.

Event descriptions, as they appeared on the BDW 2016 website.

MONDAY 2nd MAY

Big Data Crunch: SciTech Planetarium

Big Data Crunch is the perfect way to celebrate Perth Big Data Week 2016. This event will connect high school students with data scientists, researchers and industry professionals from a wide range of leading organisations. Schools interested in attending this event should contact the Scitech bookings office on 9215 0740

When: Monday 2nd May 2016, 11.30am-2.45pm
Where: Scitech Planetarium, Sutherland Street, West Perth.

Big data Week 2016 Launch

BDW 2016 Launch – The Hon. Bill Marmion MLA, Minister for Finance and State Development, and Western Australia's leaders in big data across government, industry and research, will officially launch Perth Big Data Week 2016 at Scitech, prior to the first event, Big Data Crunch.

TUESDAY 3rd MAY 2016

23 Things Fling - A 23 Research Data Things Community Catch-up

Research data holds the key to many critical questions we face today. During 2016 the Australian National Data Service (ANDS) is facilitating the 23 Research Data Things self-directed learning program for anyone with an interest in research data management. Participants learn what research data is; Why it is such a global hot topic; How to find and re-use it, manage it, describe it, how to make it open to the world, and much more.

Welcome to the Perth 23 Things Fling…
This gathering is an opportunity for all Perth participants and community discussion groups to get-together to share their learning in a convivial atmosphere, rich in people keen to manage, promote, use, share and discover the wealth of research data. All welcome - register today as venue capacity is limited..

Want to join the ANDS 23 Research Data Things?
It's never too late to start 23 Research Data Things! You can join in at any point and don't need to go back and complete previously released Things (unless you want to), and you can just do those Things that are of interest to you. Each Thing presents 3 levels of challenge and is released weekly in advance (see the poster).
There are many ways in which you can engage with others across Australia and beyond through webinar catch ups, online discussions on Meetup and local community groups near you, as well as this Perth-wide 23 Things Fling.

When: Tuesday 3rd May 20-16, 16:00 - 18:00
Where: Reid Conference room (Level 2), Reid Library, UWA (Visitor parking in Car Park 3).
Target Audience: People interested in research data management e.g. librarians, data managers, researchers, students or others undertaking the ANDS 23 Research Data Things course of self-directed learning

Host: Dr Agi Gedeon, Australian National Data Service

CCI Innovation Breakfast: Using big data technology to solve small data business challenges

The term Big Data has become a household name, while in reality it is often an enigma for many businesses who don't have big data and find the idea of it confusing and daunting. However, utilising your existing data, regardless of its size, can provide practical solutions to your greatest business challenges.

CCI invites you to join us for breakfast and gain an insight into the benefits and practical solutions big data analytics and technology can provide your business.
Hear from industry experts Brett Looney, Solutions Architect, Amazon Web Services and Mark Stevens,

Managing Director, Skrydata as they discuss their experience and success in using big data tools for small data problems and provide you with the tools to increase business agility and drive down costs, now and into the future.

When: Tuesday 3rd May, 07:45-09:00 (registration from 07:30)
Where: CCI Function Centre, 180 Hay Street, East Perth

Science on the Swan

Science on the Swan is a parallel event taking place in Perth from 3-5 May 2016. This year's theme is "Cutting Edge", and with 13 international speakers and many of Australia's top researchers, this conference brings together experts from multiple disciplines who will talk on their latest discoveries and advances in health and biotechnology.

Science on the Swan is initiated and run by all five of WA's Universities (The University of Western Australia, Curtin University, Murdoch University, Edith Cowan University and the University of Notre Dame), the Harry Perkins Institute of Medical Research, the Telethon Kids Institute, WA Health Translation Network, the key teaching and research hospitals and the WA Government through the Department of Health and the Office of Science.

The topics of discussion at Science on the Swan and Big Data Week Perth complement each other, and in particular, Science on the Swan's first day of events are closely aligned with Big Data applications.

When: Conference dates: 3-5 May 2016

Big Data events: Tuesday 3rd May 2016: 08:00 - 17:00
- Opening Keynotes – Big Data and Precision Medicine: 08:20 - 09:45
- Symposia – Big Data and Application to Precision Medicine: 10.15 - 12.00
- Symposia – Precision Medicine, Big Data and Informatics: 14:45 - 16.45pm

Where: Perth Convention and Exhibition Centre, 21 Mounts Bay Road, Perth, WA.
Target audience: Health Researchers

Sharing Your Data Through Open Data WA

Big Data Week 2016 is a great opportunity to celebrate progress with the Open Data Policy for WA and help more people share their open government data with the broader community.

Nearly 1,000 datasets from some 40 WA public sector agencies are now shared with the WA community through data.wa.gov.au. The Open Data team at Landgate have received requests from the community for much more - from land development applications, to shark attacks and popular baby names. That's where you come in.

Help the WA community do more with the data we generate every day by joining the Open Data team in The Vault @ Spacecubed on 3 May for a concentrated hands-on workshop to accelerate your data sharing.
We'll help you start the journey of sharing your knowledge with the world in a new way through data.wa.gov.au over some good coffee and morning tea.

Bring your data, bring your laptops, and bring your questions!

We'll be working through the workshop and publishing some data live - but if you'd like to get hands-on and experiment with publishing your own data, please bring your own device along.

When: Tuesday 3rd May 2016, 09:30 - 10:30
Where: Spacecubed (The Vault), 45 St Georges Terrace, Perth

WEDNESDAY 4th May 2016

Elastic Data Analytics at Pawsey: Hadoop and Spark for Scientific Workflows

The Pawsey Supercomputing Centre, in collaboration with Monash University is rolling out new services for Elastic Data Analytics in the Nectar Research Cloud. Come and learn how about new tools for Apache Spark and Hadoop cluster management and join a discussion about using these tools in your research. If you've considered using data analytics tools or you are currently using these tools and would like an easier way to manage your workflows, then this talk is for you.

When: Wednesday 4th May, 10:00 - 11:30 (registration from 09:45).

Where: The Pawsey Supercomputing Centre
Target audience: Researchers, State Government, anyone interested in data analytics

The HIVE, research and big data

The Curtin HIVE (Hub for Immersive Visualisation and eResearch), is a multi-disciplinary facility made up of four large display screens with different functions that can be used for anything from scientific research to video conferences or even performance art.

Curtin Researchers will provide a short presentation about their research and then demonstrate the results using the HIVE displays. The purpose is to demonstrate the importance of visualisation in providing a means to understand vast amounts of data.

Presentations:

- **"3D Reconstruction Processing for the HMAS Sydney & HSK Kormoran 3D Imaging Project"**
On the 19th of November 1941 the HMAS Sydney and the HSK Kormoran sunk each other in one of the most devastating events in Australia's maritime history. In 2015 Curtin University, the WA Museum and DOF Subsea conducted a detailed 3D imaging survey of the two wrecks. The expedition collected approximately 500,000 still images and 300 hours of HD video which will be used to generate 3D models of both wreck sites using a photogrammetric 3D reconstruction process.

- **"The GaLactic and Extragalactic All-Sky Murchison Widefield Array (GLEAM) survey: Viewing the Sky with Radio Eyes"**
The Murchison Widefield Array is a new radio telescope located in outback Western Australia. Its unusual design allows us to observe the whole sky at low frequencies and at the same resolution as the human eye -- over ten times better than ever before seen. We've recently completed our all-sky survey, GLEAM, taking over 5,000 observations, processing nearly 500TB of data using 2M CPU-hours. I'll share our new images of the sky and explain how they're helping us understand the Universe, and paving the way to building the Square Kilometer Array.

When: Wednesday 4th May, 16:00 - 17:00
Where: Curtin Hive, Curtin University.

THURSDAY 5th MAY 2016

Big Data from Space

An introduction to Copernicus, The European Earth Observing programme - what is it, how you can access the data and what you can do with it.
Copernicus, headed by the European Commission (EC) in partnership with the European Space Agency (ESA), is the most ambitious Earth Observation programme to date. A complex set of systems collect data from multiple sources, such as earth observation satellites and ground stations, airborne and sea-borne sensors. Reliable and up-to-date information are made available to users to support and improve a wide range of applications such as environment protection, management of urban areas, regional and local planning, agriculture, fisheries, health, climate change, tourism and civil protection.

Copernicus data is free to all users and as part of this programme, ESA is establishing a mechanism to coordinate access to all the relevant data from the multitude of different satellite missions, and has just come to an agreement with Geosciences Australia to ensure access from Southeast Asia and South Pacific.

Sentinel data is already freely available to users. If you would like to explore the imagery in advance of this event, it is available at the Sentinel Data Hub and you can download the free data toolbox here.

We also invite participants to give a flash presentation (5 mins) on any issue and the potential for Copernicus to help. If you are interested please email: bigdataweekperth@pawsey.org.au

When: Thursday 5th May, 11:00 - 13:00
Where: The Pawsey Supercomputing Centre

Who is this event for?: Anyone with an interest in acquiring and using high quality Earth Observation data e.g. Researchers, scientific professionals, industry, government agencies, students.
Format of event: Informal presentation and discussion event at The Pawsey Supercomputing Centre, Perth, followed by a networking opportunity.

Big Data, eResearch and the Cloud

Accelerating the time to science
We have brought together leaders in the field of cloud computing to give insight to the rapidly changing world of Big Data in eResearch. This free event will give you the rare chance to hear from two leading providers in cloud platforms, Microsoft Azure and Amazon Web Services (AWS).

Find out how the cloud is creating innovative opportunities, changing the face of computing, for business, government and research organisations. From Big Data, transparency, privacy, and security of data, there will be four short talks by leaders in the field, followed by networking over light refreshments.

Speakers
- **Professor Matt Bellgard**: Director, Centre for Comparative Genomics, Murdoch University
- **Dr Rhys Francis**: eResearch Strategic Consultant
- **Andrew Phillips:** ANZ Public Sector Country Manager, Amazon Web Services
- **Adrian White**: Head of Scientific Computing, APAC and Japan, Amazon Web Services
- **Jonathan Wade**: Cloud Solutions Architect, Azure at Microsoft

When: Thursday 5th May, 18:30 - 20:30 (seating from 18:15).
Where: Scitech Planetarium, City West, West Perth, 6005

Visualisation of Big Imaging Data: Radio Astronomy Case

SKA will produce multidimensional images of Universe of unprecedented detail and sizes. This presents a new challenge for extracting the knowledge from the data, as well as ensuring the quality of data. Remote visualisation with adaptive fidelity could aid the data exploration and quality control. We will briefly review the current state of visualisation in astronomy, and then present SkuareView remove visualisation software developed at ICRAR, and deployed on AWS and Pawsey compute clouds as part of Astronomy Data Services project to visualise 50-500GB spectral-imaging data cubes. The software has been build around JPEG2000 and JPIP technologies. A live demonstration and discussion concludes the presentation.

When: Thursday 5th May, 14:00 - 15:30
Where: Pawsey Exhibition Space, The Pawsey Supercomputing Centre
Target audience: geoscience, geology, land surveying, remote sensing, medical imaging

Data Centric Processing Software Practices for the SKA and Beyond

The SKA is pushing the boundaries of data management and processing, not just in sheer volume or FLOPs required, but even more so in terms of affordability. The challenge is to squeeze as much science out of the data as possible, given the limited capital and operational budget. Essentially the science capabilities of the SKA will be compute budget bound. Given this constraint we are employing the latest technologies and research into the SKA prototyping efforts and this can benefit both the SKA, but also any other domain dealing with large volume complex processing workloads, be that scientific or commercial. During this event we want to share some of our experience, and that of our partners', with existing, new and emerging technologies in the space of 'Big Data', in plain software engineering and in citizen science and usage of cloud computing. The event will be organised in an agile way, where people can 'vote' for proposed presentations or demonstrations.

When: Friday 6th May, 09:00 - 12:00
Where: The Ken and Julie Michael Building, 7 Fairway, Crawley. Several locations within the building, to be confirmed.
Who is this event for: The target audience are professionals in software engineering, scientific and commercial data analysis, as well as anybody with a solid background in those areas.

ECU / CISCO: Big, Bigger, BIGGEST

This event will look at ways in which cyber security is increasingly data driven to solve problems at network speed.

Professor Craig Valli from ECU will present on how big data is being used to research into problems of cyber security using network honeypots to gather cyber attack intelligence.

Gary Hale, Director of Cyber Security & Innovation @Cisco will talk about Cisco's threat intelligence platforms, their reason for being, and how their applied to enhance our customer's efficacy.   Everyday there are 19.7 billion web requests blocked, which represents three web threats blocked per person on the planet every day, with 86% of all e-mail blocked as spam.
Cisco's 'big data' threat intelligence platforms create the visibility and intelligence through the following:
- 100 terabytes (TB) of security intelligence daily
- 1.6 million deployed security devices including firewalls, Cisco IPS sensors, and web and email appliances
- 6 million networks automatically updated every 6 seconds
- 1.5 million malware samples a day are captured and sandboxed
- 150 million endpoints
- 13 billion web requests per day
- 35 percent of the world's enterprise email traffic

When: Friday 6th May, 11:00 – 12:30
Where: Edith Cowan University, Mount Lawley Campus: Building 10, room 131. Location is indicated on the
map
Format of event: Seminar style, with presentations and Q&A

Inaugural ANDS Monthly Tech Talk

ANDS, together with NeCTAR, QCIF, Intersect, VICNode, eRSA and Pawsey, have joined forces to organize a monthly *Tech Talk* virtual meeting. The purpose for this virtual meeting is to: (1) provide a forum for developers to discuss topics of interest to them; (2) enable a dialogue between developers and NCRIS facilities (e.g. ANDS, NeCTAR and RDS).

The first Tech Talk virtual meeting will be held **online at 13:00 - 14:00**, **6 May, 2016**. We have two speakers confirmed:
- Gerhard Weis (Griffith, BCCVL)

- Rowland Mosbergen (Stemformatics)

We will also have a panel discussion regarding "**Cloud Power Users**". This will be followed by social time for informal networking (***light refreshments, beer and soft drinks will be available***).

When: Friday 6 May 2016, 13:00-14:00 @ 5 locations - Brisbane, Sydney, Melbourne, Adelaide, Perth
Where: You can attend this *Tech Talk* meeting from any one of the following four sites:
- **QCIF:** Room 505, Level 5, Axon Building (47), UQ, St Lucia Campus
- **Intersect:** Board room , Level 12, 309 Kent St Sydney.
- **VICNode:** Room 322, Doug McDonell Building, University of Melbourne, Parkville Campus
- **eRSA:** Boardroom South, Level 11, Flinders University: 182 Victoria Square, Adelaide
- **Pawsey:** Pawsey Centre Conference room (Burvill Ct, Kensington)

Woodside Future Lab Exchange

Woodside is proudly hosting a FutureLab Exchange event, which will see representatives from government, universities and industry brainstorm ideas on how data science can play a role in solving issues facing Western Australia.
Teams will work together on issues across a range of areas such as regional development, emergency services, educational institutes, and electoral enrollment. The focus will be on unlocking innovative solutions using Big Data and through collaborative brainstorming, we hope to identify new opportunities and solutions that would not otherwise be discovered.

Format:
Participants will be grouped into teams consisting of government agency representatives (the problem owners), academia, industry contributors and innovators. The event will be hosted on the FutureLab Exchange web application, which is a collaborative tool used to facilitate the communication of ideas.
At the conclusion of the event, a judging panel will select a winning problem based on the identified potential solutions, which will then have the opportunity to be explored in depth through a Woodside FutureLab-hosted DataHack later in the year. Teams of data scientists and subject matter experts will be brought together to help identify and create solutions to the selected problem.

Pre-read material detailing the participating government agencies and the nature of the problems being addressed will be circulated to participants prior to the event.

When: Friday 6th May 2016: 14:00 - 17:00
Where: Woodside Plaza (240 St George's Terrance, Perth).

For further information:
- Contact: Kerryn Batsioudis on (08) 9348 6402 or by email kerryn.batsioudis@woodside.com.au.
- Details on last year's Woodside DataHack: [Fiona Wood Foundation DataHack](#)

MAY 2016	MON 2		TUE 3	WED 4	THUR 5	FRI 6
			PARALLEL EVENT: Science on the Swan (Perth Convention and Exhibition Center)			
07:00 – 08:00			(Science on the Swan Big Data Day) 07:30 - 09:00			
08:00 – 09:00			CCI Innovation Breakfast CCI-WA			09:00 - 12:00
09:00 – 10:00			09:30 - 10:30 Sharing Your Data Through Open Data WA Landgate			Data Centric Processing Software Practises for the SKA and Beyond
10:00 – 11:00				09:45 - 11:30 Elastic Data Analytics: Hadoop and Spark for Scientific Workflows Pawsey		
11:00 – 12:00					11:00 - 13:00	ICRAR
12:00 – 13:00	12:00 - 14:45	BDW 2016 LAUNCH Scitech			Big Data From Space Pawsey	11:30 - 13:30 Big, Bigger, BIGGEST ECU /CISCO
13:00 – 14:00	Big Data Crunch					13:00 - 14:00 Inaugural ANDS Monthly Tech Talk ANDS
14:00 – 15:00	Scitech				14:00 - 15:30 Visualisation of Big Imaging Data: Radio Astronomy Case Pawsey	14:00 - 17:00 Woodside FutureLab Exchange
15:00 – 16:00						
16:00 – 17:00			16:00 - 18:00 23 Things - A 23 Research Data Things Community Catch-Up ANDS	16:00 - 17:00 The HIVE, Research and Big Data Curtin University		Woodside
17:00 – 18:00						
18:00 – 19:00						
19:00 – 20:00					18:30 - 20:30 Big Data, eResearch and the Cloud Scitech & Murdoch University	