

Melbourne 20-23 Nov 2018

FOSS4G SotM Oceania



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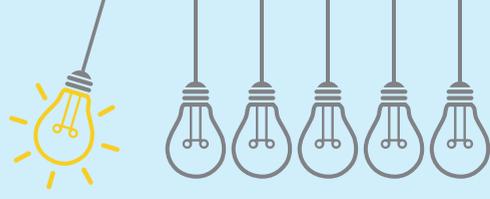


Code of Conduct

FOSS4G SotM Oceania is dedicated to providing a harassment-free conference experience for everyone, regardless of gender, gender identity and expression, sexual orientation, disability, physical appearance, body size, race, age or religion. We do not tolerate harassment of conference participants in any form. Sexual language and imagery is not appropriate for any conference venue, including talks. Attendees violating these rules may be asked to leave the conference without a refund at the sole discretion of the conference organisers. The CoC applies at all official and unofficial events. Unofficial events include any location where attendees may be congregating.

For more information, visit <https://foss4g-oceania.org/attend/code-conduct>

WELCOME



Message from the chair

Why are we here this week? If it were only to explain our work, or learn new skills, we could do this from the comfort of our homes. But there's a special energy generated by the conversations that happen when you cross paths with a fellow nerd. Human connections, like the ones we make this week, are the glue that binds a community together and makes it strong.

Open source & open data geospatial communities rely on these connections to produce the tools & data we're all about. The people we spend time with here will become our colleagues, clients, collaborators, and friends over the years to come. This is community building in action, and it's a big part of what we're here to do.

On behalf of the organising committee, it's my privilege to welcome you to the inaugural FOSS4G SotM Oceania. We're proud to present the many wonderful contributions from people across the Oceania region and beyond. With a packed program of workshops, presentations, social events, and a Community Day, we're aiming to make a big impact, and make this a week to remember.

John Bryant
Conference Chair

Organisers

The FOSS4G SotM Oceania 2018 organising committee is made up of geospatial enthusiasts from academic, business, and government sectors.

John Bryant	Alex Leith	Dr. David Dean
Sarah Goodwin	Greg Lauer	Phillip Mallis
Trisha Moriarty	Edoardo Neerhut	Cameron Shorter
Daniel Silk	Kerry Smyth	Vasiti Soko
Dr. Adam Steer	Jonah Sullivan	Dr. Martin Tomko

Contributors

Many volunteers have made significant contributions to this event, including:

Pete King	Cholena Smart	Jonathan Garber
Kristy Van Putten	Emma Hain	Rowan Winsemius
Joe O'Connell		

SOCIAL EVENTS



Icebreaker

When:

Tuesday 20th November,
6pm – 8pm

Where:

The Shaw Davey Slum (upstairs)
171-175 Elgin St, Carlton

Entry requirements:

Registered conference attendees
welcome

Women in Geospatial Breakfast

When:

Wednesday 21st November,
7.30am

Where:

Seven Seeds Cafe
114 Berkeley St, Carlton

Conference Dinner

When:

Wednesday 21st November,
6pm – 9pm

Where:

Brunswick Mess Hall
400 Sydney Rd, Brunswick

Getting there:

Take the #19 tram up Royal Parade & Sydney Road. A taxi should be less than \$20. Walking is a good option, but leave yourself at least 45 minutes to get there.

GeoRabble

When:

Thursday 22nd November,
From 5.30pm

Entry requirements:

Get your free ticket at
<https://georabble.org/>

Where:

The Clyde Hotel
385 Cardigan St, Carlton

WORKSHOPS DAY

Tuesday 20th November

Morning, 9am – 12.30pm

WORKSHOP	PRESENTER
1. Visualising Geospatial data with Mapbox JS GL	Sarah Goodwin
2. Making maps with OpenStreetMap	Andrew Harvey
3. Introduction to running Auto Scaling Geoserver and PostgreSQL/PostGIS in the Cloud (AWS)	John Hildebrandt
4. A gentle introduction to spatial web services by building your first web application	Rowan Winsemius
5. Processing spatial data with JavaScript	Steve Bennett
6. All the OTHER places you will love using Python in QGIS	Nathan Woodrow
7. Bridging Scientific Computing and Virtual Reality with R	Miles McBain, Michael Sumner

Afternoon, 1.30pm – 5pm

WORKSHOP	PRESENTER
1. 0 to 100 on AWS – Building a full stack web mapping application with PostGIS, Geoserver, OpenLayers and ReactJS	Brendan Jurd, Brent Schiller, Joe O'Connell
2. QGIS Python Plugin Development	Jonah Sullivan
3. Spatial data APIs - making your spatial data public without giving away database access	Henry Walshaw
4. Remote sensing and terrain analysis with SAGA-GIS	Rohan Fisher
5. FOSS4G routing with pgRouting	Daniel Kastl
6. Geospatial data visualizations with d3	Mila Frerichs
7. Open source point cloud processing and visualisation with the PDAL and Potree stack	Adam Steer

CONFERENCE DAY ONE

Wednesday 21st November

TIME	SESSION	PRESENTER	ROOM
8.45am	Welcome		PLT 
9.00am	Plenary Keynotes	Paul Ramsey, Jane Elith	PLT 
10.20am	<i>Morning tea</i>		
10.50am	Establishing a Serverless Dynamic Tile Generation Workflow TILES TILES TILES	Callum Lynch	PLT 
	Geospatial on a shoestring – my experiences in Native Title FOSS4G ADOPTION	Cameron Poole	B 
	BeyondTracks: an OpenStreetMap case study STATE OF THE MAP	Andrew Harvey	C 
11.10am	Raster tiles to vector tiles: how to cross the gulf TILES TILES TILES	Steve Bennett	PLT 
	Free satellite imagery and DEM analyses enabling natural resource management in the developing world FOSS4G ADOPTION	Rohan Fisher	B 
	Australia to Vanuatu: A visual exploration of the mapping challenges in Asia and the Pacific STATE OF THE MAP	Edoardo Neerhut	C 
11.30am	Mapping the Census with PostGIS, Python, and a whole lot of stubbornness: A Vector Tiles Story TILES TILES TILES	Keith Moss	PLT 
	The Road Less Travelled: A corporation's journey to an open source enterprise geospatial platform FOSS4G ADOPTION	Ed Haverkamp	B 
	Using open source mapping tools to understand indoor navigation routes suitable for vision impaired users STATE OF THE MAP	Nimalika Fernando	C 
11.50am	Choosing Tegola to create vector tiles TILES TILES TILES	Angus Scown	PLT 
	The evolution of a homegrown QGIS developer FOSS4G ADOPTION	Nathan Woodrow	B 
	Does our choice of open data sets matter: a case study analysing public open space policy in Melbourne STATE OF THE MAP	Julianna Rozek	C 
12.10pm	WMS-V - Video Map Tiles for the 3rd or 4th Dimension TILES TILES TILES	Tim-Hinnerk Heuer	PLT 
	Our journey adopting QGIS in a corporate environment FOSS4G ADOPTION	Emma Hain	B 
	Moving Through Country: A Community Based Project to Map and Share Indigenous Cultural Perspectives STATE OF THE MAP	Kate Crawford	C 

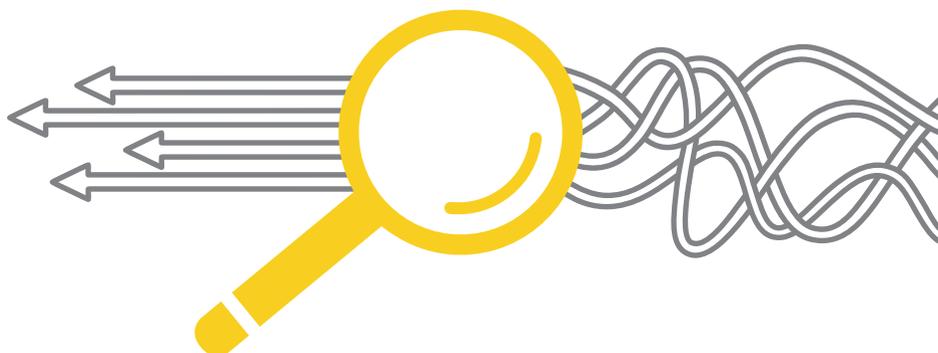
TIME	SESSION	PRESENTER	ROOM
12.30pm	<i>Lunch</i>		
1.30pm	QGIS Sorceress in Training: A QGIS User's Story VISUALISATION/WEB MAPPING	Hannah Dormido	PLT 
	10 Things I've Learnt About PostGIS THE_GEOM: A SPACE ODDITY	Daniel Silk	B 
	Secrets of Antony Green: Calculating notional margins for electoral redistributions DATA MATTERS	Alex Lum	C 
1.50pm	QGIS for Exploratory Data Analysis and Visualisation VISUALISATION/WEB MAPPING	Nyall Dawson	PLT 
	Is the turf(js) greener on the other side? Lessons learnt from maintaining a FOSS4G library. THE_GEOM: A SPACE ODDITY	Rowan Winsemius	B 
	Open Source Spatial Tools for Biodiversity and Environmental Data in the Atlas of Living Australia DATA MATTERS	Peggy Newman	C 
2.10pm	Māori Maps: layering of people and place VISUALISATION/WEB MAPPING	Hirini Tane	PLT 
	Dr. Strangedata or: How I Learned To Stop Worrying and Love the_geom THE_GEOM: A SPACE ODDITY	Tom Lynch	B 
	Open Data for Australia's mining, oil, and gas sector DATA MATTERS	Jessie Cato	C 
2.30pm	GeoBI: A data visualisation platform using D3, leaflet, Geoserver, PostGres and php VISUALISATION/WEB MAPPING	Neal Johnston	PLT 
	Falling off the edge of the world: Dealing with the antimeridian in spatial software THE_GEOM: A SPACE ODDITY	Craig de Stigter	B 
	Tupaia – Health resource mapping in Asia-Pacific DATA MATTERS	Michael Nunan	C 
2.50pm	Bootleaf, an open-source web-map framework VISUALISATION/WEB MAPPING	Stephen Lead	PLT 
	Meshes are needed for geospatial work THE_GEOM: A SPACE ODDITY	Michael Sumner	B 
	Laying the Foundations for a National Building Outlines Dataset DATA MATTERS	Megan Davidson	C 
3.10pm	<i>Afternoon tea</i>		
3.40pm	Plenary Panel Session: Human Evolution, Ethics and Open Source Mapping Panelists: Adam Steer, Hannah Dormido, Serryn Eagleson, Edwin Liava'a	Moderator: Maurits van der Vlugt	PLT 
5.00pm	<i>End of day</i>		

CONFERENCE DAY TWO

Thursday 22nd November

TIME	SESSION	PRESENTER	ROOM
8.55am	Welcome		PLT 
9.00am	Plenary Keynotes	Nyall Dawson, Alyssa Wright	PLT 
10.20am	<i>Morning tea</i>		
10.50am	Who actually uses geospatial data? DATA PUBLISHING AND PORTALS	Hamish Campbell	PLT 
	Blockchain is knocking. Will FOSS4G answer? NEW TECHNOLOGY	Kiersten Jowett	B 
	GeoAI: a feature extraction tool set using Tensor Flow and Keras to classify features using RGB imagery REMOTE SENSING	Sagar Soni	C 
11.10am	My Victoria – Big Data for Small Business DATA PUBLISHING AND PORTALS	Leon Woodhouse, Julian Hutton	PLT 
	State of the a-R-t – Advances in mapping in R NEW TECHNOLOGY	David Cooley	B 
	The Open Data Cube in a Box REMOTE SENSING	Alex Leith	C 
11.30pm	When data can't be open – securing sensitive spatial data with open source software DATA PUBLISHING AND PORTALS	Angus MacAulay	PLT 
	GeoPackage and the Related Tables Extension NEW TECHNOLOGY	Brad Hards	B 
	UAV Change detection using FME and QGIS REMOTE SENSING	Anton van Wyk	C 
11.50pm	TerriaJS: An open-source framework for 3D geospatial data explorers on the web DATA PUBLISHING AND PORTALS	Kevin Ring	PLT 
	How to create a fast and cost effective serverless geospatial analysis pipeline using AWS (Lambda) NEW TECHNOLOGY	Mila Frerichs	B 
	Cloud Web Services for the Open Data Cube REMOTE SENSING	Paul Haesler	C 
12.10pm	The future of open data DATA PUBLISHING AND PORTALS	Anne Harper	PLT 
	pgFaaS: Geo-Processing made simple with Serverless technology NEW TECHNOLOGY	Luca Morandini	B 
	Dotloom – Next Generation Point-cloud Platform REMOTE SENSING	Daniel Kastl	C 

TIME	SESSION	PRESENTER	ROOM
12.30pm	<i>Lunch</i>		
1.30pm	Plenary Lightning Talks		
	A new map-centric travel blog	Stephen Lead	PLT ●
	OSGeoLive lightning overview	Cameron Shorter	
	Generating Javascript code from QGIS expressions for “fun”	Nathan Woodrow	
	Adventures in reverse engineering ESRI style and lyr files	Nyall Dawson	
	Validating and updating OpenStreetMap schools with open data	Andrew Harvey	
	Using QGIS for Teaching Land Development	Andrew Bashfield	
	Exploring total water levels around Australia with R shiny and Leaflet	Julian O’Grady	
	Remotely Famous	Hamish Campbell	
	Where the Streets have no Name	Daniel Kastl	
	Calculating Liveability Across Australia Using Open Data and Open Tools	Rebecca Roberts	
	Big Data, Open Source & Ethics – The Lessons From Movement Data	Hugh Saalmans	
	Teaching GIScience with FOSS4G – is there an alternative?	Martin Tomko	
	Nifty data visualisation tricks using Mapbox-GL-JS	Steve Bennett	
	I note your comment. OSM Comments system	Ewen Hill	
3.10pm	<i>Afternoon tea</i>		
3.40pm	Community day pitches		PLT ●
4.00pm	Conference close		PLT ●
4.20pm	<i>End of day</i>		



COMMUNITY DAY

Friday 23rd November

Where:

The Old Arts Building, University of Melbourne
9am – 5pm (*free catering provided all day*)

We will follow the FOSS4G tradition of hosting a code sprint after the conference, and additionally be including OpenStreetMap Mapathons. Participation in the Community Day is free of charge and all folks interested in giving back to open source and open data geospatial communities are welcome. Please bring your own laptop to participate. To register, please visit <http://communityday.foss4g-oceania.org>

COMMUNITY DAY ACTIVITIES

We'd love your assistance in participating in one of the larger projects too:

Missing Maps Mapathon: With the assistance of the Missing Maps project, Maptime Melbourne and Global Health Alliance Melbourne (GLHAM) will be running a Mapathon to help map the parts of our region and the developing world where infectious diseases affect urban/rural communities.

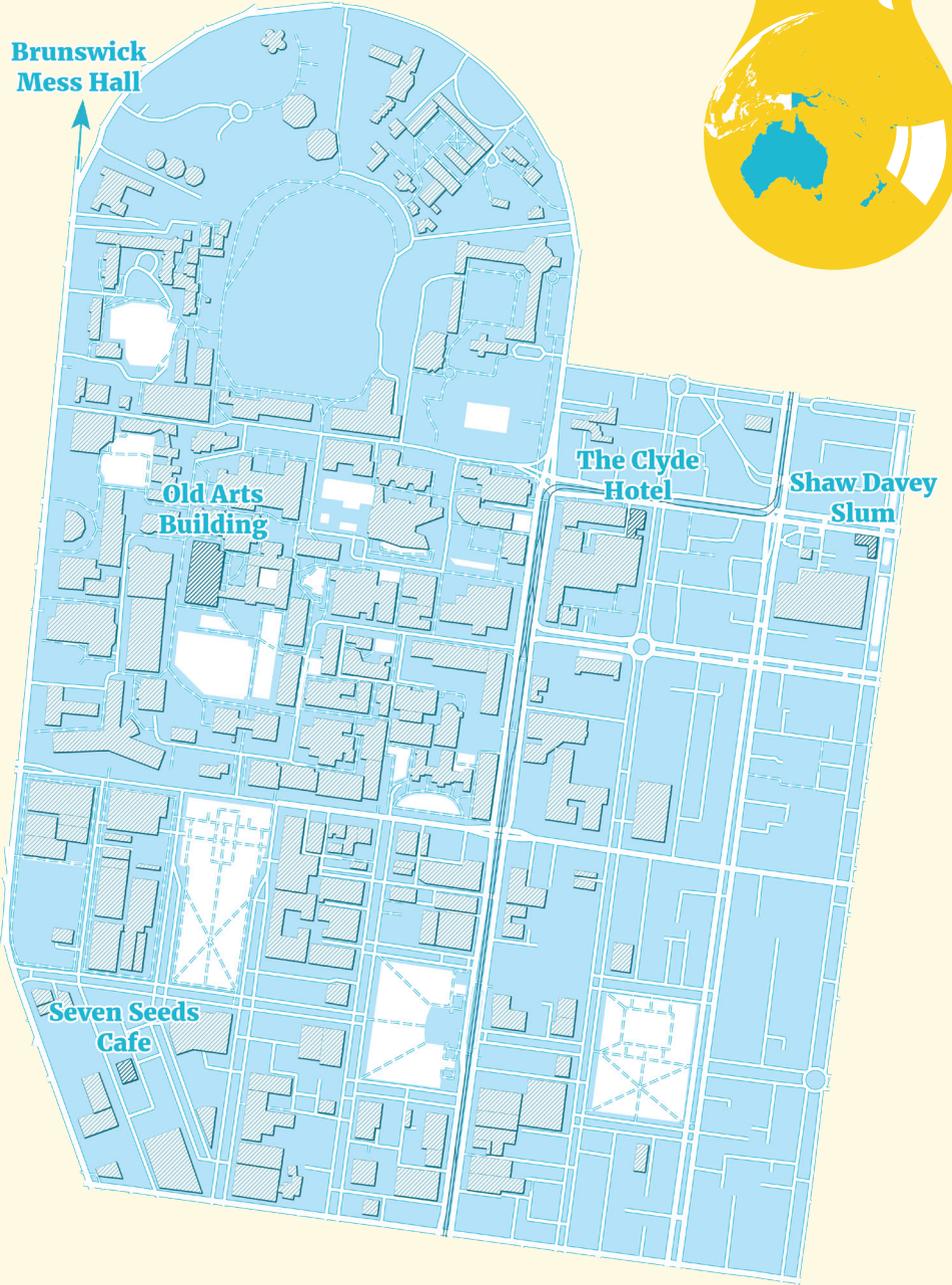
Improving OpenStreetMap with government open data: Using tools to help automate comparisons between OpenStreetMap and other open data sources and manually reviewing each change together with other available ground truthing sources, we'll see if we can improve OpenStreetMap through a local mapping import sprint.

Easing into open source geo-software: This event is aimed at helping people new to open source software development ease into the system. Take your first steps to contributing to code bases - working on submitting issues, finding issues, forking repositories, making pull requests. Come along with a favourite project in mind to work on - there's no requirement to choose a specific task, work on something which interests you!

Open Data Cube: This project would like to explore the integration of a WMS service with a Jupyter environment to enable the use of Open Data Cube to produce and save data, and enable it to be visualised and shared. This will be a rapid hackathon to build a proof of concept that should be able to be refined post-event in order to build operational capacity.

OSGeoLive Quickstart refresh and/or Move to the cloud: OSGeoLive is distribution of Open Source Geospatial Software preconfigured with ~ 50 applications, datasets, project overviews and quickstarts. It is used at conferences and training sessions around the world and is often people's first exposure to OSGeo software. There are two key projects we'd like to tackle on the day that we'd love your involvement in.

Challenge: Telling Stories with Data(.Vic): Data journalism, and visualisation are fast becoming a powerful way of telling stories. Accessing any of the datasets on data.vic, this challenge asks participants to extract and tell stories from data. Alternatively how might we facilitate citizens' own inquiries and investigations via the Victorian Government Open Data Portal? If interested, help data.vic solve two problems they need assistance with.



**Brunswick
Mess Hall**



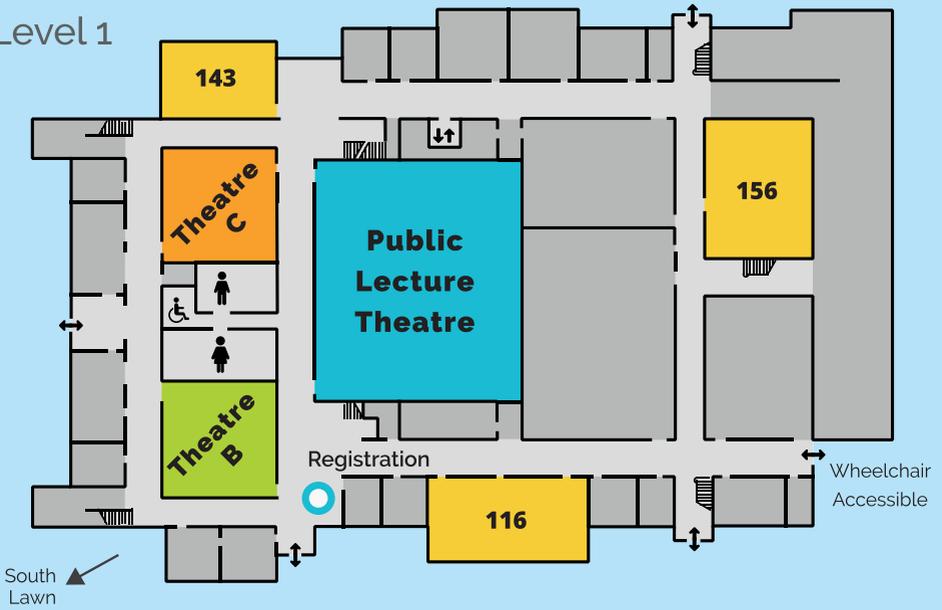
**Old Arts
Building**

**The Clyde
Hotel**

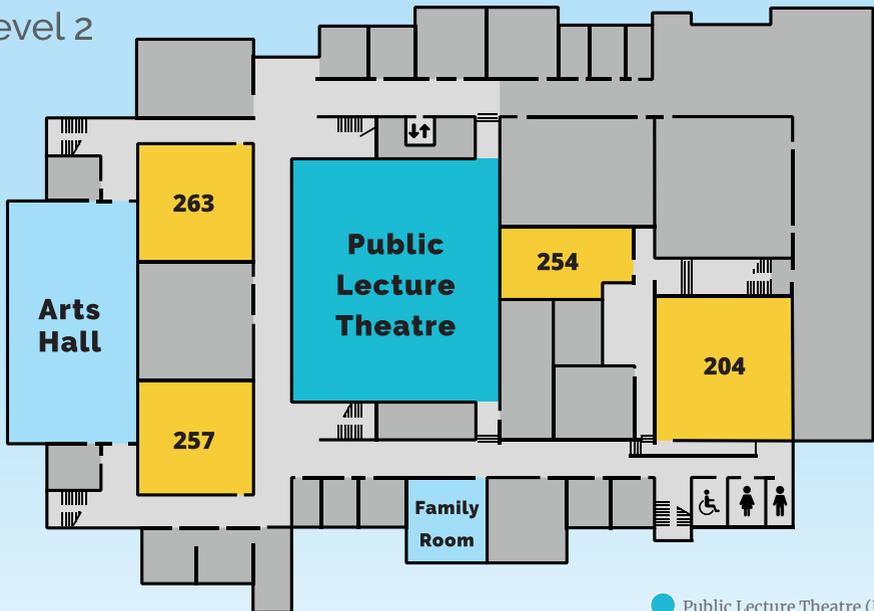
**Shaw Davey
Slum**

**Seven Seeds
Cafe**

Level 1



Level 2



-  Public Lecture Theatre (PLT)
-  Lecture Theatre B
-  Lecture Theatre C
-  Workshop Rooms