

Conference at a Glance

MONDAY

	ROOM 333	ROOM 327/328	ROOM 238	ROOM 296/298
8:30 AM	WELCOME and KEYNOTE SPEAKER MICHAEL MILASKA Ballroom			
10 AM	BREAK			
10:30 AM	Web Applications I	Data Science I: Automation	GIS for Decision Support I: Childhood Trauma Challenge	<i>Session TBD</i>
12 PM	LUNCH Ballroom			
1:30 PM	WORKSHOP Intro to R	Web Applications II	GIS for Decision Support II: Infrastructure & GIS	WORKSHOP
3 PM	BREAK			
3:30 PM	WORKSHOP GISCorps Mapathon I	Data Science II: Databases	GIS for Decision Support III: Smart Communities	ArcGIS Pro Python Tools and Processes Development
5 – 7 PM	EXHIBITOR SOCIAL Location TBD			

TUESDAY

	ROOM 333	ROOM 327/328	ROOM 238	ROOM 296/298
8:30 AM	WORKSHOP Species Distribution Mapping	Remote Sensing I: Photogrammetry	Data Science III: BI	WORKSHOP Intro to Survey123
10 AM		BREAK		
10:30 AM		Remote Sensing II: UAS	Emergency I: Fire	WORKSHOP Survey123 Deep Dive
12 PM	LUNCH Ballroom			
1 PM	URISA Business Meeting			
1:30 PM	WORKSHOP R & Leaflet	WORKSHOP GISCorps Mapathon 2	Emergency II: Earthquakes and Floods	Student Session
3 PM	KEYNOTE SPEAKER REPRESENTATIVE NANCY NATHANSON Ballroom			

Keynote Presentations

The Exploration and Mapping of Saturn's Moon Titan

Michael Milaska, Planetary Ices Group / Jet Propulsion Laboratory / California Institute of Technology, Pasadena, CA

Saturn's moon Titan is the most Earth-like world in the Outer Solar System. Just like Earth, Titan has a thick nitrogen atmosphere that supports an active weather cycle underneath organic haze layers. The Cassini spacecraft discovered that underneath Titan's haze layers are familiar features like rivers, lakes, seas, dunes, plateaus, canyons, and mountains. But unlike Earth, frigid Titan's rainfall is methane, the lakes and seas are liquid hydrocarbons, the dunes, plains, and plateaus are organic sediments, and the mountains are made of rock-hard water ice. We are using the dataset collected by the Cassini-Huygens mission to map, inventory, and explore the surface of Titan and see how the landscape and geological processes on that world compare and contrast with those of planet Earth.



Closing Keynote

Representative Nancy Nathanson, State of Oregon House Representative

Nancy Nathanson is the Oregon State Representative for House District 13. She was elected in 2006, and has been instrumental in the passing of the Geospatial Data Sharing bill during the 2017 legislative session.

Previously was on the Eugene city council, where she was given multiple awards including the "Outstanding Elected Official" award by the Lane Council of Governments and the "West Eugene Wetlands Award," presented by the Wetland Executive Team in 2005.

Nancy attended Northwestern University and later the University of Oregon where she received a Bachelor of Science in urban geography.



Presentation Topics

GIS for Decision Support

There are a variety of ways GIS is used to support decision-making. The presentations and discussions in this track will explore a number of those. At GIS in Action last year, the community took up a challenge to get involved in helping support decisions that would improve outcomes related to childhood trauma. The progress that has been made on that challenge will be presented and attendees will be asked to help envision what to do next. Infrastructure investment is a key topic nationally right now, and infrastructure investments are made in Oregon regularly. GIS supports decisions about how those investments are planned, prioritized and implemented, and presentations will be made to illustrate that support. The City of Portland has undertaken a 'smart community' initiative with GIS as a key supporting element. Attendees will find out how that has been pursued, and will gain ideas and understanding about how to replicate some of those techniques in their own communities.

Data Science

A lot more goes into Geographic Information Science than just the software. Developing analytic tools using industry or open source software platforms has become the standard way for the GIS professionals to extend the usability of GIS data to impact decision makers and users alike. The presentations in this track will demonstrate different methods of creating new functionality to expose the value of GIS using Python, R and other languages. Other sessions explore opportunities in enterprise database management systems to enhance data storage and querying of spatial data, and advancements in data analytics and geovisualizations.

Remote Sensing

Remote sensing technologies are evolving – new algorithms, new sensors, and new platforms, including unmanned aerial systems (UAVs). Practitioners are taking advantage of these advances to detect, measure, compare, map and research patterns and changes in unimaginable places. After you hear the keynote speech about Mapping Titan, come learn about remote sensing projects in our own back yard. Learn how The State of Oregon is gathering and analyzing one-foot orthoimagery, how the Bureau of Land Management deploys their fleet of drones, how water conservation benefits from an eye-in-the-sky perspective, and what steps you can take to get started with a remote sensing mapping project of your own.

Presentation Topics

Web Applications

Web applications are being increasingly developed and used in all areas of GIS. The sessions in this track will include case studies, provide you with instructional information to take with you as you build your own apps, and more.

Emergency

Description of track coming soon!

Student Session

Last year we saved 90 minutes to hear from students from local colleges and universities who wanted to show off their projects and gave them an opportunity to present in front of industry professionals. It was well received, and we're pleased to offer the opportunity again this year. Subjects will vary, but never be boring! Please join us in celebrating the achievements of our up and coming GIS professionals!

**Presentation titles and descriptions
coming soon!**

Workshops

GISCorps Mapathon

Emmor Nile, URISA GISCorp

Species Distribution Mapping with R

Emilie Henderson, Institute for Natural Resources

Spatial Analysis and Visualization with R and Leaflet

Aaron Cochran, Oregon Department of Human Services

Introductory R

Emilie Henderson, Institute for Natural Resources

Aaron Cochran, Oregon Department of Human Services

ArcGIS Pro Python Tools and Processes Development

David Howes, David Howes, LLC

**Full descriptions of workshops, and registration
information coming soon!**