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isprs

**March 2019** 

GeoForAl Monthly Newsletter



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### Be part of "Geo for All"

1. Activities of the Network

 Ottawa, Ontario, OSGeo Meetup Group meets on the third Thursday of each month. If you are located in the area, go to the link to sign up to the group and get updates about future events.
(http://www.meetup.com/Ottawa)

OSGeo/

### 3. Events



By Suchith Anand GeoForAll

The Sixth African Higher Education Week and RUFORUM Biennial Conference 2018.

20 Ministers of Higher Education, over 30 senior government officials and experts, 105 Vice Chancellors met at the Sixth African Higher Education Week and RUFORUM Biennial Conference from 22-26 October, 2018, in Nairobi, Kenya. The Conference was organized under the overall theme of "Aligning African Universities to accelerate attainment of Africa's Agenda 2063". The Government of Kenya through its Ministry of Education and nine RUFORUM member universities in Kenya were the lead organizers of the Conference.

I thank the Government of Kenya and RUFORUM for inviting me to deliver a keynote at this important conference on the topic of "Harnessing the digital potential to drive higher education transformation in Africa". Geospatial science plays an important role in agricultural systems, specifically in realizing United Nation's Sustainable Development Goal to 'End hunger, achieve food security and improved nutrition and promote sustainable agriculture'.

https://www.godan.info/news/goda n-african-higher-education-week-2018-and-ruforum-biennialconference

https://www.osgeo.org/foundationnews/harnessing-the-digitalpotential-to-drive-higher-educationtransformation-in-africa/







## **Editorial Board**

Please refer to the appropriate person according to the following table:			
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	)		





## **GeoForAll Themes**

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#### OpenCity Smart

 Chairs: Chris Pettit (Australia), Patrick Hogan (USA)

Mail list: <u>http://lists.osgeo.org/cgi-bin/</u> mailman/listinfo/geoforall-urbanscience

> Website:

http://wiki.osgeo.org/wiki/Opencitysmart

Teacher Training & School Education

 Chairs: Elżbieta Wołoszyńska-Wiśniewska (Poland), Nikos Lambrinos (Greece)

Mail list: <u>geoforall-teachertraining@lists.</u> <u>osgeo.org</u>

> Website:

http://wiki.osgeo.org/wiki/GeoForAll TeacherTrai ning SchoolEducation

#### CitizenScience

Chairs: Peter Mooney (Ireland) and Maria
Brovelli (Italy)

Mail list: <u>https://lists.osgeo.org/cgi-</u> bin/mailman/listinfo/geoforall-geocrowd

Website: <u>http://wiki.osgeo.org/wiki/Geocrowdsourcing Citi</u> <u>zenScience FOSS4G</u>

AgriGIS

Chairs: Didier Leibovici (U.K.) and Nobusuke
Iwasaki (Japan)

Mail list: <u>https://lists.osgeo.org/cgi-</u> bin/mailman/listinfo/geoforall-agrigis

Website: <u>http://wiki.osgeo.org/wiki/Agrigis</u>

## GeoForAll Regional Chairs and Contact Information

### North America Region

Chairs: Helena Mitasova (USA), Charles Schweik (USA), Phillip Davis (USA) Subscribe at mail list <u>http://lists.osgeo.org/cgi-</u> <u>bin/mailman/listinfo/geoforall-northamerica</u>

Email: na.gfa.chair@osgeo.org

### **Iberoamerican Region**

Chairs: Sergio Acosta y Lara (Uruguay) and Silvana Camboim (Brazil) and Antoni Pérez Navarro (Spain). Subscribe at mail list: <u>https://lists.osgeo.org/mailman/listinfo/geoforall-</u> <u>iberoamerica</u>

Email: geoforall-iberoamerica@lists.osgeo.org.

### Africa Region

Chairs: Msilikale Msilanga (Tanzania), Serena Coetzee (South Africa) and Bridget Fleming (South Africa) Subscribe at mail list <u>http://lists.osgeo.org/cgi-</u> <u>bin/mailman/listinfo/geoforall-africa</u>

Email: africa.gfa.chair@osgeo.org

### Asia Region (including Australia)

Chairs: Tuong Thuy Vu (Malaysia/Vietnam) and Venkatesh Raghavan (Japan/India) Subscribe at maillist <u>http://lists.osgeo.org/cgi-</u> <u>bin/mailman/listinfo/geoforall-asiaaustralia</u>

Email: asia.gfa.chair@osgeo.org

### **Europe Region**

Chairs: Maria Brovelli (Italy) and Peter Mooney (Ireland) Subscribe at mail list <u>http://lists.osgeo.org/cgi-</u> <u>bin/mailman/listinfo/geoforall-europe</u>

Email: eu.gfa.chair@osgeo.org





## 4. Conferences

#### <u>Europe</u>

#### <u>May 2019</u>

1. 19-22 May: <u>16th International Conference on</u> <u>Information Systems for Crisis Response and</u> <u>Management</u> (ISCRAM 2019) Venue: Valencia, Spain

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2. 29-30 May: <u>Free GIS Days</u>
Venue: Girona, Spain.
Open to new <u>Proposals and workshops</u>

#### <u>June 2019</u>

**3.** 10-14 June: <u>ISPRS Geospatial Week 2019</u> Venue: University of Twente, Enschede, The Netherlands

#### <u>July 2019</u>

**4.** 1-4 July: <u>29<sup>th</sup> EARSeL Symposium 2019</u> Venue: Salzburg, Austria

#### August 2019

**5.** 26-30 August: <u>FOSS4G Bucharest 2019</u> Venue: Bucharest, Romania

#### September 2019

**6.** 19-20 September: <u>Hot Summit 2019</u> Venue: Heidelberg, Germany

**7.** 21-23 September: <u>State of the Map</u> Venue: Neuenheimer Feld campus, Chemistry lecture hall building, Heidelberg, Germany

# North and Central America and the Caribbean

#### <u>April 2019</u>

#### **8.** 1-5 April: <u>GeoInfo – 2019</u>.

Venue: International Conference Center of Havana, Cuba Abstracts Deadline: January 20, 2019 **9.** 2-4 April: <u>RDA 13th (P13) Plenary Meeting</u> Venue: Loews Hotel - Philadelphia, Pennsylvania, USA

**10.** 3-7 April: AAG Annual Meeting Venue: Washington, DC, USA.

**11.** 15-18: FOSS4G NA Venue: San Diego, California, USA

#### <u>June 2019</u>

**12.** 10 June: <u>GeoEd '19</u> Venue: Jefferson Community and Technical College, Louisville, Kentucky, USA.

#### South America

#### July 2019

**13.** 1-5 July: XVII Biennial <u>The International</u> <u>Association for the Study of the Commons</u> (IASC) Conference Venue: Lima, Peru.

#### <u>Africa</u>

<u> April – May 2019</u>

14. April 30 – May 3: <u>ICT4D</u>
Venue: SPEKE RESORT MUNYONYO, Wavamunno
Road, Kampala, Uganda

#### <u>Asia</u>

#### July 2019

**15.** 15-20 July: <u>29th International Cartographic</u> <u>Conference (ICC2019)</u> Venue: Tokyo, Japan.

#### <u>Oceania</u>

#### September 2019

 16. 18-21 September: 15<sup>th</sup> International Conference on <u>GeoComputation 2019</u>
Venue: Queenstown, New Zealand





### **5. Webinars**

#### An announcement from gvSIG team

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For the fourth year running, we launch the gvSIG Festival, the online conference in which anyone in the world with an Internet connection can attend or participate as a speaker. The event will be held on March 27th and 28th 2019.

This year we want to make a special appeal to the group of women who are part of the gvSIG Community. We would like that a large percentage of the presentations of this 4th Festival are given by you, so we encourage you to present your proposals.

In the gvSIG project, we have always wanted to work and contribute our bit in the fight against gender discrimination. In internal debates we have always taken into account that within a movement such as open source software, and the values associated to it, the obvious absence of women should be worrying. And maybe it's the biggest problem. That should be worrying, and it is not.

The sector of open source geomatics, and gvSIG, do not escape these dynamics either. Even significant progress, there's an obvious absence of women in our collective. And the worst thing, we not only find that there are only a few initiatives that allow to create spaces to favour their integration, but it seems that it is not necessary.

And even if it's only a little that we can contribute, we would like to start working on this small step to help to reverse this situation. gvSIG festivals are open to any presentation related to the project, from anywhere in the world and in any language. From now on, we start the path to the next '4th gvSIG Festival'.

The information about the proposals submission can be found on the event website: <u>http://www.gvsig.com/festival</u>

## 7. Training programs

- GeoForAll educational materials have been transferred to our new web site. <u>GeoForAll</u> educational inventory system, a place to search and share educational materials
- Free course GIS for Archaeologists. "It is not necessary to register anywhere. The course is online and can be followed from anywhere in the world. The course will be available in English and Spanish. Each week we will publish a post on this blog that will contain a video-tutorial with exercises and access to the course data. Therefore, you only need to follow the video-tutorials to complete the course.
- 5-day immersion workshop held at Yale University, New Haven, CT, USA.

Geo-Computation and Environmental Analysis Workshop (May 13th-17th, 2019)

More info at

https://research.computing.yale.edu/training/geocomputation-bootcamps/geo-computation-andenvironmental-analysis-workshop

• 5th International Summer School held at the Univ. of Basilicata, in the magnificent town Matera, Italy.

Geocomputation using free and Open Source Software (3th-7th June 2019)

#### More info at <u>www.spatial-ecology.net</u>

Students will be guided through the use of a command line interface using advanced open source data processing routines for geocomputation in Linux environment.







## **12. Articles**

### **Abbreviations**

by Nikos Lambrinos, Chief Editor, and Michael Finn.

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For those who would like to support this effort, please send any abbreviations to the Chief Editor (<u>labrinos@eled.auth.gr</u>).

3DEP: 3-D Elevation Program

AAG: Association of American Geographers

AGS: American Geographical Society

AM/FM: Automated Mapping/Facilities Management

ASPRS: American Society for Photogrammetry and Remote Sensing

AURIN: Australian Urban Research Infrastructure Network

BBSRC: Biotechnology and Biological Sciences Research Council

**BIM: Building Information Modelling** 

CAADP: Comprehensive African Agricultural Development Programme

CAD: Computer Aided Design

CaGIS: Cartograhy and Geographic Information Society

CEGIS: Center of Excellence for Geospatial Information Science

CEOS: Committee on Earth Observation Satellites

CI: CyberInfrastructure

CLGE: The Council of European Geodetic Surveyors

CODATA: Committee on Data for Science and Technology

COGO: Coordinate geometry

CRS: Coordinate Reference System

CSA: Canadian Space Agency

CUDA: Compute Unified Device Architecture

DAAC: Distributed Active Archive Center (of NASA) **DEM: Digital Elevation Model DSM: Digital Surface Models** DWG: Design file format **DXF:** Drawing Interchange File ECMWF: European Center for Medium range Weather Forecasting EOS: Earth Observation Science EOSDIS: Earth Observing System and Data Information System **EPA: Environmental Protection Agency** EPSG: European Petrol Survey Group (used in projection IDs) ESA: European Space Agency ESERO: European Space Education Resource Office EUROGI: European Umbrella Organisation for **Geographic Information** EuroSDR: European Spatial Data Research FOSS: Free and Open Source Software FOSS4G: Free and Open Source Software For Geospatial **GCP: Ground Control Point** GloFAS: Global Flood Awareness System **GNSS: Global Navigational Satellite System** GODAN: Global Open Data for Agriculture and Nutrition **GPS: Global Positioning System GPX: GPS Exchange Format GRASPgfs:** Geospatial Resource for Agricultural Species and Pests and Pathogens with workflow integrated modeling to support **Global Food Security GSoC:** Google Summer of Code HOT: Humanitarian OpenStreetMap Team HPC: high-performance computing ICA: International Cartographic Association

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ICSU-WDS: International Council for Science -World Data System **INSPIRE:** Infrastructure for Spatial Information in Europe **ISPRS:** International Society for Photogrammetry and Remote Sensing JAXA: Japan Aerospace Exploration Agency KML: Keyhole Markup Language LiDAR: Light Detection and Ranging LOC: Local Organizing Committee LOD: Level Of Detail MIL: Media and Information Literacy MoU: Memorandum of Understanding NAD: North American Datum NCSA: National Center for Supercomputing Applications NED: National Elevation Dataset NEPAD: NEw Partnership for African Development NGA: National Geospatial Intelligence Agency NHD: National Hydrologic Dataset NLCD: National Land Cover Dataset NSDI: National Spatial Data Infrastructure NSF: National Science Foundation **OECD: Organisation for Economic Co-Operation** and Development **OER: Open Educational Resources** OGC: Open Geospatial Consortium **OSGeo: Open Source Geospatial Foundation** OSM: OpenStreetMap **OTB: Orfeo Tool Box** RCMRD: Regional Centre for Mapping of **Resources for Development RDA: Research Data Alliance** ROSHYDROMET: Russian Federal Service for Hydrometeorologyand Enviromental Monitoring RUFORUM: Regional Universities Forum for capacity building in agriculture

SAR: Synthetic Aperture Radar SDI: Spatial Data Infrastructure SIGTE: The GIS and Remote Sensing Service of the University of Girona, Spain SQL: Structured Query Language STISA 2024: Science Technology Innovation Strategy for Africa STSM: Short Term Scientific Missions TIN: Triangulated Irregular Network **UAV: Unmanned Aerial Vehicle** UN-GGIM: United Nations Global Geospatial Information Management USGS: U.S. Geological Survey USGIF: United States Geospatial Intelligence Foundation VGI: Volunteered Geographic Information XSEDE: Extreme Science and Engineering **Discovery Environment** WCS: Web Coverage Service WFS: Web Feature Service WGCapD: Working Group on Capacity Building and Data Democracy WGS: World Geodetic System WISERD: Wales Institute of Social & Economic Research, Data & Methods WMO: World Meteorological Organization WMS: Web Map Service WMTS: Web Map Tiles Services WOIS: Water Observation Information System WPS: Web Processing Service







## 15. Awards

OSGeo is pleased to announce the 2018 Google Codein Grand Prize winners, who each receive a free trip to Google headquarters in California, along with a parent/guardian, are students (note that these are the student's account names, due to privacy concerns):

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- Mattoopackoo
- ShubhamSharama

OSGeo's Google Code-in finalists (who receive Google hoodies) are:

- Armaan
- Flash
- Shivam Rai
- SunveerSingh

See here: https://codein.withgoogle.com/winners/#winners the winners from all organisations

## **17. Ideas / Information**

**1.** To post your FOSS4G educational information go to <u>http://www.osgeo.org/education</u>. There you can find more educational activities posted by members of our community.

FOSS4G is the annual global event of the Open Source Geospatial Foundation. It is the largest technical geospatial Open Source conference in the world. The FOSS4G conference focuses on Free and Open Source Software for Geospatial applications. In addition to high level technical talks four key domain are discussed every year to showcase the connection between free and open source software and communities from neighbouring domains. 

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2. The third edition of the EU Datathon has been officially launched on 28 January 2019 by the **Publications Office of the European Union**, in partnership with the **Romanian Presidency of the Council of the European Union**.

The EU Datathon is an event growing in popularity aiming to further **stimulate the use of open data** issued by the European Union. It allows competitors to showcase their data skills and innovative ideas. Furthermore, it offers them the opportunity to network and gather support in order to continue developing their ideas after the competition.

#### The challenges

Participants are invited to develop apps and interactive visualisations offering new services or public information insights to citizens, public authorities, and businesses. They have to use **at least one dataset** made available by the EU Institutions, Agencies, and other bodes and **combine** it with **at least one dataset** of the competition's partners. The participating teams can compete with their apps in **one horizontal or two thematic challenges.** 

Challenge 1: 'Innovative ideas through EU open data'

Challenge 2: 'New insights into economics and finance'

Challenge 3: 'Tackling climate change'

#### The prizes

The competition is supported by the **European Parliament's** Preparatory Action "Linked Open Data in the European Public Administration" and the **European Commission ISA<sup>2</sup> programme** (Interoperability solutions for public administrations, businesses and citizen). Joining the 2019 competition gives the opportunity to win one of the cash prizes in each challenge.



at



1st prize EUR 15.000

2nd prize EUR 7.000

3rd prize EUR 3.000

The competition will culminate with the final conference in Brussels on 13 June 2019, where finalists will present their projects in front of an expert jury and the open data community.

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More information on the competition rules, evaluation process, webinars (and previous editions) at

https://publications.europa.eu/en/web/eudatathon/ 2019-rules

#### Details

https://publications.europa.eu/en/web/eudatathon/ home

## EUDATATHON 2019

**3.** Building on the <u>Africa Regional Data Cube</u> and the Digital Earth Australia program, developed by Geoscience Australia, Digital Earth Africa will use data cube technology to translate over 30 years of Earth observation satellite imagery into information and insights on the changing African landscape and coastline.

Digital Earth Africa will use Open Data Cube technology that underpins Digital Earth Australia and the Africa Regional Data Cube. The <u>Open Data Cube</u> (ODC) is a global initiative to increase the value and use of satellite data by providing users with access to free and open data management technologies and analysis platforms. Details at http://www.ga.gov.au/digitalearthafrica

4. The <u>GeoTech Center</u> is pleased to announce the 2019 Undergraduate Geospatial Technology Skills Competition! The intent of the competition is to showcase the geospatial technology skills of U.S. undergraduate students. Competing students will create a project that utilizes geospatial technology to address a real-world problem. The student will then present the project and the resulting deliverables as a

**Poster** that not only highlights their use of geospatial technology, but also demonstrates their communication and presentation skills.



The competition is software neutral. There will also be a prize for the best Open Source GIS project given by the Open Source Geospatial Foundation.

Applicants must meet all of the requirements below to qualify for the competition (questions regarding eligibility can be directed to Tom Mueller (<u>Mueller@calu.edu</u>):

Applicants <u>must</u> be the age of 18 or older;

• Applicants <u>must</u> be enrolled during the **Fall 2018** term in a geospatial technology course (e.g., geographic information systems, remote sensing, GPS/GNSS, etc.) or geospatial technology program at an accredited 2-year or 4-year U.S. institution (undergraduate status);

Applicants <u>must</u> reside in the U.S.;

• All work and cartographic output <u>must</u> be the original work of the applicant;

Only <u>one</u> entry allowed per student; and

• Only *individual* student submissions allowed (no group projects).

http://www.geotechcenter.org/2019geospatial-technology-skills-competition.html

**5.** From Margherita Di Leo on behalf of OSGeo GSoC admins,

Dear OSGeo community,

We're pleased to announce that OSGeo has been selected as an umbrella organisation for Google Summer of Code (GSoC) 2019. @Mentors:

In the coming days, we admins will be inviting the mentors that have filled the form [1]. If you want to





be a mentor and haven't filled the form yet, please do it \*ASAP\*.

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@All members of the community:

Be prepared and responsive in the coming days to welcome students and answer their inquiries. From Google admins: "Students who engage with their organization early (and often) are more likely to be accepted and then succeed. We encourage you to get to know the students and help them get to know you! Please continue to flesh out your ideas lists and documentation over the next few weeks." Please, forward this email to your developer and community mailing list. @Students:

According to the official timeline [2], student application period will be March 25, 2019 - April 9, 2019.

For your convenience, this year you can also download the proposal template from [3]. After filling the template and detailing the proposal, it must be submitted following the guidelines given by Google.

Remember to submit your proposal well in advance, so that you can make the most out of the feedback from mentors and the community at large and refine your proposal until the final deadline. Read the application instructions here [4]. The same page contains all the info you need before taking action, read it all carefully! Good luck everyone! We admins will be available as always at <gsoc-admin at <u>osgeo.org</u>>, however, consider using public channels if the topic is not sensitive, i.e. soc mailing list [5]

GSoC [6] is a global program by Google aiming at bringing new developers to open source organizations. OSGeo's participation as an umbrella organization dates back to the 2007 edition. Curious to know more? Browse our wiki pages [7].

[1] https://goo.gl/forms/jMvPI7ns2NG1BL6Q2

[2] <u>https://summerofcode.withgoogle.com/how-it-</u> works/#timeline

### [3]

https://github.com/OSGeo/gsoc/blob/master/propos al\_template.md

#### [4]

https://wiki.osgeo.org/wiki/Google\_Summer\_of\_Cod e\_Recommendations\_for\_Students#Application\_instr uctions

[5] https://lists.osgeo.org/mailman/listinfo/soc

[6] <u>https://summerofcode.withgoogle.com/</u>

#### [7]

https://wiki.osgeo.org/wiki/Category:Google\_Summe r\_of\_Code

