GeoForAll
Monthly Newsletter

OSGeo
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Information from imagery

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Be part of "Geo for All"

1. Activities of the Network

- [Ottawa, Ontario, OSGeo Meetup Group](http://www.meetup.com/OttawaOSGeo/) 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

Google Code-in (GCI) is an annual online competition aimed at introducing pre-university students (13-17 years old) to open source projects, development, and communities, through short 3-5 hour tasks [1]. As opposed to the Google Summer of Code program, in GCI students are not selected by the organizations, but freely pick up tasks from one or more mentoring organizations and complete them.

Students qualify for different prizes (i.e. certificate, t-shirts, hoodies, and the grand prize of visiting Google's main headquarters in San Francisco) depending on the number of tasks they complete. During GCI, OSGeo project members have a unique opportunity to interact with pre-university students and to encourage them to become part of their respective projects.

The OSGeo team consisted of 18 community members that contributed 132 tasks from 10 projects (e.g. istSOS, GRASS GIS, GeoServer, MapServer, pgRouting, PostGIS, and Leaflet) and also OSGeo and FOSS4G.

The 2018 Google Code-in (GCI) took place 23 October - 12 December 2018, and OSGeo had 218 students that completed a task with us. These 218 students completed 471 tasks [2]. This is slightly down from last year, but this can be contributed to the change in dates of the competition. The completed tasks range from designing badges for the OSGeo website, to tests for GRASS GIS, or bug fixes for PostGIS. These tasks might seem simplistic in some cases, but the combined results are of great value to OSGeo.

Editorial Board

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

GeoForAll Themes

- **OpenCity Smart**

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

➢ Mail list: http://lists.osgeo.org/cgi-bin/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: geoforall-teachertraining@lists.osgeo.org

➢ Website:

http://wiki.osgeo.org/wiki/GeoForAll_TeacherTraining_SchoolEducation

- **CitizenScience**

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

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

➢ Website:

http://wiki.osgeo.org/wiki/Geocrowdsourcing_CitizenScience_FOSS4G

- **AgriGIS**

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

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

➢ Website: http://wiki.osgeo.org/wiki/Agrigis

GeoForAll Regional Chairs and Contact Information

North America Region

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

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: https://lists.osgeo.org/mailman/listinfo/geoforall-iberoamerica

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 http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-africa

Email: africa.gfa.chair@osgeo.org

Asia Region (including Australia)

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

Email: asia.gfa.chair@osgeo.org

Europe Region

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

Email: eu.gfa.chair@osgeo.org

4. Conferences

Europe

February 2019

1. 20-22 February: FOSS4G-IT 2019.
Venue: University of Padua, Padua, Italy
Email: foss4git2019@dicea.unipd.it

May 2019

2. 19-22 May: 16th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2019)
Venue: Valencia, Spain

3. 29-30 May: Free GIS Days
Venue: Girona, Spain.
Open to new Proposals and workshops

June 2019

4. 10-14 June: ISPRS Geospatial Week 2019
Venue: University of Twente, Enschede, The Netherlands

July 2019

5. 1-4 July: 29th EARSeL Symposium 2019
Venue: Salzburg, Austria

August 2019

6. 26-30 August: FOSS4G Bucharest 2019
Venue: Bucharest, Romania

September 2019

7. 19-20 September: Hot Summit 2019
Venue: Heidelberg, Germany

8. 21-23 September: State of the Map
Venue: Neuenheimer Feld campus, Chemistry lecture hall building, Heidelberg, Germany

North and Central America and the Caribbean

February 2019

9. 27 February-1 March: North Carolina GIS Conference (NCGIS)
Venue: Benton Convention Center, Winston-Salem, North Carolina, USA.

April 2019

10. 1-5 April: GeoInfo – 2019.
Venue: International Conference Center of Havana, Cuba
Abstracts Deadline: January 20, 2019

11. 2-4 April: RDA 13th (P13) Plenary Meeting
Venue: Loews Hotel - Philadelphia, Pennsylvania, USA

12. 3-7 April: AAG Annual Meeting
Venue: Washington, DC, USA.

13. 15-18: FOSS4G NA
Venue: San Diego, California, USA

June 2019

14. 10 June: GeoEd '19
Venue: Jefferson Community and Technical College, Louisville, Kentucky, USA.

South America

July 2019

15. 1-5 July: XVII Biennial The International Association for the Study of the Commons (IASC) Conference
Venue: Lima, Peru.

Africa

April – May 2019

16. April 30 – May 3: ICT4D
Venue: SPEKE RESORT MUNYONYO, Wavamunno Road, Kampala, Uganda

Asia

July 2019

17. 15-20 July: 29th International Cartographic Conference (ICC2019)
Venue: Tokyo, Japan.

Oceania

September 2019

18. 18-21 September: 15th International Conference on GeoComputation 2019
Venue: Queenstown, New Zealand

7. Training programs

- GeoForAll educational materials have been transferred to our new web site. GeoForAll educational inventory system, a place to search and share educational materials

- New MOOC Environmental Security and Sustaining Peace. The course focuses on the role that natural resources, environmental degradation, and climate change play in conflict and peacebuilding dynamics. This free 8 week course starts on 11 February and only requires 2 hours per week of time. Transcripts are available in English, French, Spanish, Portuguese, and Chinese. The video trailer is here: https://youtu.be/oFeFtfSHy-Q
The enrollment link is here:
https://www.edx.org/course/environmental-security-and-sustaining-peace-0

- 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.

11. Free books, educational materials, etc.

- The GEO Handbook on Biodiversity Observation Networks is a great free resource. Find it at https://geobon.org/downloads/biodiversity-monitoring/books/GEO-Handbook.pdf
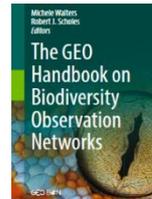
12. Articles

Abbreviations

by **Nikos Lambrinos**, Chief Editor, and **Michael Finn**.

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

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

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

SaaS: Software as a Service

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 Code-in 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):
- 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

16. Websites

1. Very useful website (https://foss4geo.wordpress.com/) which contains educational materials for QGIS from GeoAcademy's Group (Phillip Davis, Kurt Menke, Richard Smith and John van Hoesen).

2. Spatial education is key for creating global citizens. Details at https://www.osgeo.org/foundation-news/gis-at-schools/

3. Markus Neteler provides us an easy way to find GRASS GIS-related publications. Just follow https://scholar.google.com/citations?user=gJ0ZB0cAAAAJ

17. Ideas / Information

1. To post your FOSS4G educational information go to http://www.osgeo.org/education. 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.
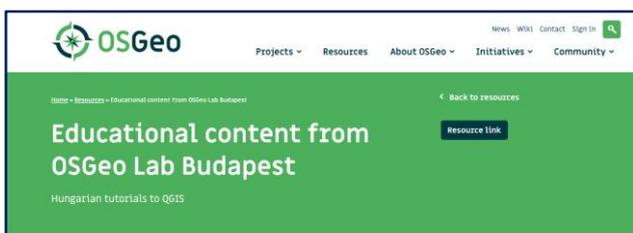
2. The Group on Earth Observations (GEO) is an intergovernmental partnership that improves the availability, access and use of Earth observations for a sustainable planet. GEO promotes open, coordinated, and sustained data sharing and infrastructure for better research, policy making, decisions, and action across many disciplines. The GEO community focuses on three global priority engagement areas: the United Nations 2030 Agenda for Sustainable Development, the Paris Agreement, and the Sendai Framework for Disaster Risk Reduction.

The GEO Secretariat and the GEO Progamme Board have launched the process to develop the 2020-2022 GEO Work Programme. You are invited to propose new   GEO   Flagships,   Initiatives,   or   Community Activities.

Implementation Plans for the proposed activities should   be   sent   to   the   GEO   Secretariat secretariat@geosec.org no later than 15 February 2019.   Detailed information and guidance for the preparation of the Implementation Plans may be

found at the 2020-2022 GEO Work Programme webpage at

http://www.earthobservations.org/gwp2020_dev.php

For those new to GEO, the Work Programme consists of GEO Community Activities, GEO Initiatives, GEO Flagships, and GEO Foundational tasks, collectively known as the GEO Implementation Mechanisms. You can get an overview idea from the GEO 2017-2019 Work Programme at

 http://www.earthobservations.org/geoss_wp.php

3. A new Transaction in GIS Special Issue

"Open Source Geospatial Science, Software and Education"

(deadline for abstract submissions: 15 February 2019)

https://wol-prod-cdn.literatumonline.com/pb-assets/assets/14679671/
Open%20Geospatial%20Science%20Software%20and%20Education.pdf

4. International Summer School organized by Spatial Ecology (www.spatial-ecology.net) held at the Univ. of Basilicata, in the magnificent town Matera, Italy.

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

A 5-day intense experience opening new horizons on the use of the vast potentials of Linux environment and the command line approach for geo-data massive processing using Bash, AWK, Python, GRASS, QGIS, GDAL/OGR, R, PKtools. We will guide newbies and experienced GIS&RS users who have never used a command line terminal to a stage which will allow them to understand and apply very advanced open source data-processing routines. Our focus is to enhance a self-learning approach and programming-languages integration. This allows participants to keep progressing and improving their skills in a continuously evolving technological environment.

More information and registration at www.spatial-ecology.net

5. The GIScience Research Group at Heidelberg University and the Heidelberg Institute for Geoinformation Technology (HeiGIT) are happy to share their GIScience github repository. It contains **over 50 open source repositories** and it's still growing. These contain results from several research projects and in particular also some very active long term activities. Most of the tools and services are related to OpenStreetMap and related Volunteered Geographic Information (VGI) sources, but also 3D geodata e.g. the Heidelberg LiDAR Operations Simulator Helios, the Voxel Octree Solar Toolkit Vostok, the 3D WebGIS framework GIScene.js etc.

6. The European Open Science Cloud (EOSC) was launched by the European Commission, the Member States, and the scientific community to provide a safe environment for researches to store, analyse, and re-use data for research, innovation, and educational purposes. Details at https://www.eosc-portal.eu.

7. Registrations for the 2019 Summer School on spatial and spatiotemporal computing: processing large-scale Earth observation (University of Münster, Sept 1–7, 2019) are now open. For more info see: https://opengeohub.org/summer_school_2019

Registration deadline: 15th of February 2019 24:00 CET.

This summer school is limited to 65 participants. In the case of higher number of applications invitations candidates will be selected based on a ranking system, which is based on: solidarity, academic output and contributions to the open source projects. To remove geographical bias, participants coming from more distant areas have a priority on the rankings list.

Dates:

- February 15th 2019 — Registration deadline;

- Mid March 2019 — All invitation letters send to applicants;

- May 15th 2019 — Deadline for settling registration fees (working programme confirmed);

- July 15th 2019 — Final programme, data sets and exercises published;

- Sun 1st September to Sun 8th September 2019 (arrival Sunday, departure Sunday; 7 night accommodation) Summer School;

Note: OpenGeoHub Summer school will be held one week after the FOSS4G conference (Bucharest, 26–30 August 2019).

Registration fees:

The registrations fees for this Summer School will be in the range 400–500 EUR. Registration fees cover costs of using facilities, lunch and coffee breaks, administration costs, local travel costs, and costs of travel and accommodation for lecturers. Participants from ODA countries (employed by an organization or company in ODA-listed country; http://www.oecd.org/dac/stats/daclist.htm) typically receive a subsidized price for the registration costs. Also, full-time students (MSc or PhD level) are offered subsidized price, provided that they are, at the moment of application, not employed at any University or research institute.