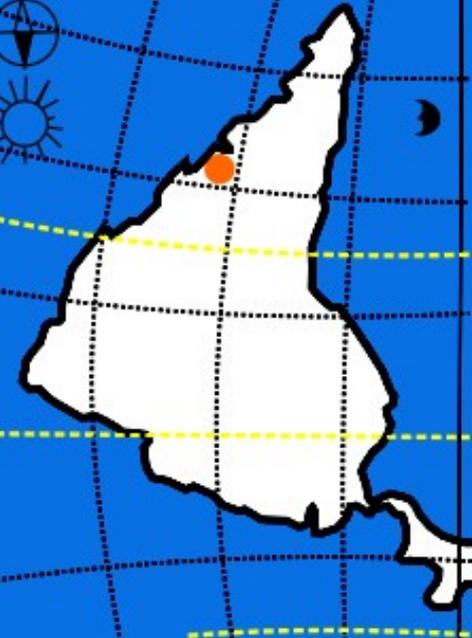




8vas Jornadas de  
Latinoamérica  
y el Caribe de gvSIG

2das Jornadas de  
Tecnologías Libres  
de Información Geográfica y  
Datos Abiertos



Transformando paradigmas de  
tecnología e información

## GeoForAll

una red de laboratorios para garantizar una  
educación geoespacial accesible a nivel  
global

20 de octubre de 2016

Sergio Acosta y Lara  
sergio.acostaylara@mtop.gub.uy



# GeoForAll -

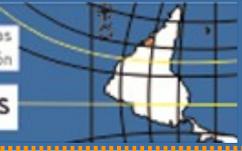
## El compromiso de OSGeo con la educación y la investigación: Cómo funciona y cómo unirse

Sergio Acosta y Lara

Coordinador gvSIG Batoví – Dir. Nac. Topografía/MTOP

Con contribuciones de Helena Mitsova, Suchith Anand, María A. Brovelli, Silvana Camboim, Antoni Pérez Navarro, Rania Elsayed, Tuong-Thuy Vu y otros

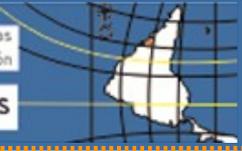




# Quiénes somos

**Una red global de laboratorios de  
educación e investigación  
académica + socios de gobiernos y  
la industria**





# Cuál es nuestra misión

**Hacer que la educación y las  
oportunidades geoespaciales sean  
accesibles a todas y todos**





# Qué proponemos

## Una ciencia geoespacial abierta basada en:

- software libre geoespacial
- datos abiertos
- estándares abiertos
- recursos educativos abiertos
- acceso libre a publicaciones de investigación





# Cuáles son nuestros objetivos

- Crear oportunidades de investigación y enseñanza en ciencia geoespacial abierta
- Construir una infraestructura global y abierta para la enseñanza y la investigación
- Establecer colaboraciones entre la academia, el gobierno y la industria en torno a la ciencia y la educación geoespacial abierta





# Cómo empezó

2011: Memorando de Entendimiento entre OSGeo y la Asociación Cartográfica Internacional - ICA





# Nuevos MdeE

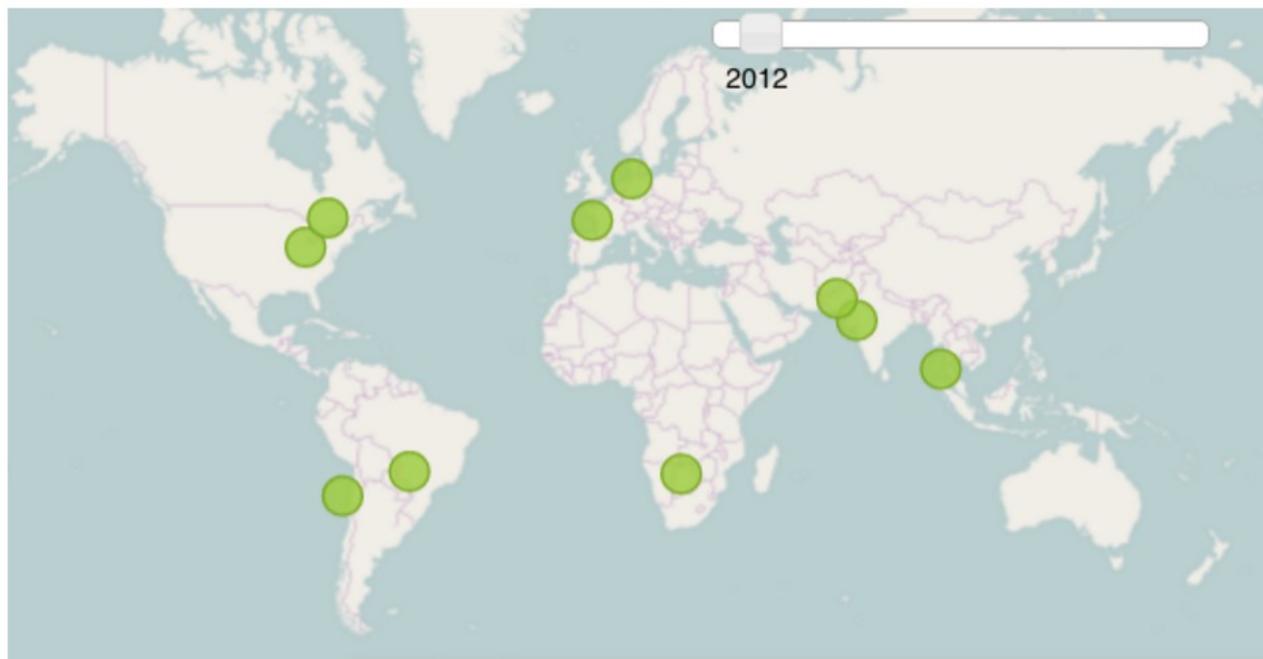
Con la Sociedad Internacional de Fotogrametría y Percepción Remota (ISPRS) en 2014; con el Consorcio Universitario para las Geociencias (UCGIS) previsto para este año





# Mapa laboratorios en 2012

10 laboratorios en 2012





# Mapa laboratorios en 2016

¡Más de 100 laboratorios en todo el mundo en 2016!

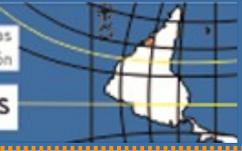




# Organización

- Director Global: Suchith Anand
- Presidentes regionales para cada continente:
  - son las personas de contacto para nuevos miembros
- Consejo Asesor: presidentes de OSGeo, ICA, ISPRS, mas académicos y técnicos de reconocida trayectoria
- Más de 100 directores de laboratorios





# Boletín de noticias

- jefe de redacción Nikos Lambrinos, Univ. Aristóteles de Tesalónica, Grecia
- reseña de actividades mensuales, laboratorio del mes
- eventos, conferencias, seminarios, cursos, talleres
- financiamiento, becas, programas de intercambio
- ideas, contribuciones sociales



<http://www.geoforall.org/newsletters/>





# Educación e investigación

- Desarrollo de una plataforma de acceso libre a material educativo compartido basado en FOSS4G (y no limitado a proyectos OSGeo)

[http://www.osgeo.org/educational\\_content](http://www.osgeo.org/educational_content)

- Desarrollo/contribución al software libre geoespacial, datos abiertos
- organización/participación en Code Sprints comunitarios
- premios e incentivos a estudiantes y laboratorios



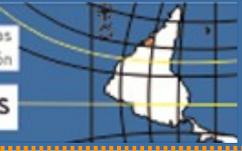


# Seminarios en línea

¿interesado en presentar? Contacto: [Rafael.Moreno@ucdenver.edu](mailto:Rafael.Moreno@ucdenver.edu)

The screenshot shows the 'Geo for All' website. On the left is a navigation menu with items: Home, About, Advisory board, How to join, Locations, News, Newsletters, Resources and references, Training, and Webinars. The main content area features a banner with the text 'Be part of "Geo for All"' and a sub-header 'Home » Webinars'. Below this is a 'Webinars' section with a world map showing 111 labs worldwide as of 10th October, 2016. The text describes the 'Geo for All' and University of Colorado, Denver, USA webinar series, coordinated by Rafael Moreno. It provides contact information and a link to the 'Geo4all Webinars YouTube Channel'. An 'Upcoming webinars' section lists a webinar on September 29, 2016, about FOSS and FOSS4G in Mexico. A call to action button says 'Click here to join webinar. No registration required.' with a Zoom link. The footer includes logos for OSGeo, ICA/ACI, and ispr/s.

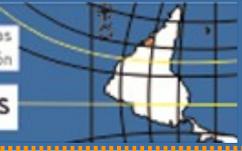




# Conferencias

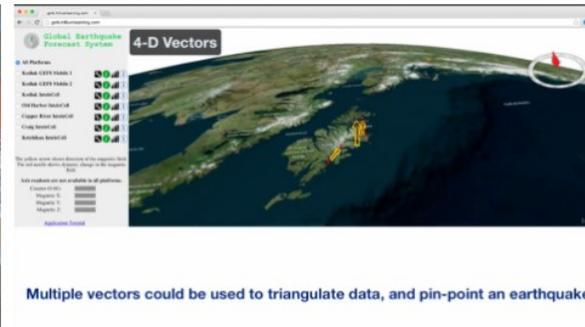
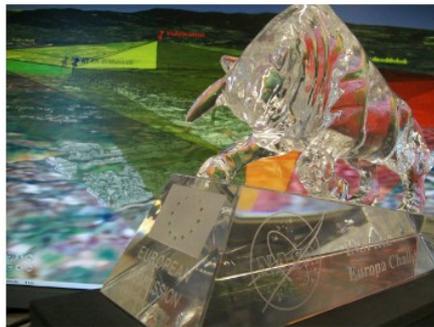
- sesiones académicas en los FOSS4G mundiales
- contribuciones con sesiones en las principales conferencias científicas (ISPRS, AGU, EGU, ...)
- premios a los mejores trabajos de estudiantes por parte de OSGeo, ICA, ISPRS





# Más actividades...

- grupos temáticos:
  - OpenCity smart (ciudades inteligentes abiertas)
  - AgriGIS
  - CitizenScience
  - educación básica, con la colaboración mapstory.org
- desafío NASA World Wind-Europa





# Y más...

Contribución a Objetivos del Desarrollo Sustentable de la ONU en 6ª. sesión del Comité de Expertos en Gestión de Información Geoespacial Global (UN-GGIM agosto 2016)



**Reduce Inequality within and among countries**

**THE GLOBAL GOALS**  
For Sustainable Development

**Target**  
Target 10.5: The goal call for action to reduce inequalities within and among countries. Inequality can have a strong geographic component and maps are a powerful tool to understand factors and plan measures to address such issues.

**Indicator**  
Indicator 10.5.1: A variation on the measure of income inequality by offering open data, open source software, open standards and open education.

**10 REDUCED INEQUALITIES**

Step should be available for all

---

**GEOlab IN ACTION**

GEOlab is actively collaborating with the Humanitarian OpenStreetMap Team (HOT) and the Missing Maps project to organize and run humanitarian mapeathons, such as the mapeathon after the Nepal's earthquake in April 2015. A world record mapeathon with more than two hundred to yearold children was held in March 2016.

A Volunteer Geographic Information (VGI) collaborative platform named PolCrowd has been developed since 2013. Based on NASA World Wind virtual globe, it is a multidimensional and multithematic platform to organize, visualize and collaboratively enrich VGI collected through mobile devices.

GEOlab is also involved in teaching and research using Open Source platforms, and organizing FOSS4G events.

©2016 - GeoLab and Open Source Information Laboratory, University of Valencia

**VIVA GIS! EMPOWERMENT THROUGH MAPPING**

In 2015, the University of Pretoria partnered with the Viva Foundation, in the Alaska informal settlement in the City of Tshwane, to start a project that aimed to ultimately empower the settlement. The project was driven by the final year geoinformatics students in the GIS.

The first phase was the mapping of the settlement. Data such as dwelling numbers, location of taps and point of interest and footpaths were captured.

Four projects were identified to implement a web GIS solution:  
Fire safety and Management, Health Care, Service Delivery and Security and Surface Runoff Risk Zones.

©2016 - GeoLab and Open Source Information Laboratory, University of Valencia

---

**LABGEOVIRE - MAPPING INEQUALITY IN BRAZIL**

Brazil is one of the countries with the highest economic and social inequality levels.

Labgeovire has been promoting mapeathons to improve the use of VGI to supply data were it is not available. Additionally, the group develops Open Source solutions, conducts research and creates applications such the study: Mapping inequality in Curitiba, Brazil.

The maps show the spatial distribution of income, race and homeless population in Curitiba.

This is an example of mapping the SDG indicator:  
10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

©2016 - GeoLab and Open Source Information Laboratory, University of Valencia

**GVSIG BATOVI**

gvSIG Batovi is an open GIS (Geographic Information System) software tool applied to educational environments through which Primary and Secondary students can acquire knowledge of geography using laptops through didactic and interactive information. Source: Bem

Primary and Secondary students can make their own thematic maps.

Knowledge of geography in an attractive, motivating and interactive environment

The tool, after its launch, became the first Uruguayan distribution that gives rise to gvSIG Educa, which aims to be a tool for educators to provide students a better analysis and understanding of the territory, as well as collaborate with the assimilation of special concepts using visual tools.

©2016 - GeoLab and Open Source Information Laboratory, University of Valencia

---

**GEORFOR ALL**  
Mapa de la distribución mundial de la tecnología de información geoespacial de código abierto.

©2016 - GeoLab and Open Source Information Laboratory, University of Valencia

---

The main goal of the ICA Commission on Open Source Geospatial Technologies aims to promote multi-national holistic research in free and open source geospatial technologies in order to make accessible the latest developments in open source tools to the wider cartographic community.

Open data contribute to transparency by making available to the public relevant data to analyse current situation and propose new public policies.  
Open source software is a vital tool to democratize access to mapping platforms, making these technologies available for organizations such as NGOs and developing countries institutions.  
Open standards are key to integrate organizations, including local and international levels, and allow the coordination of efforts from several groups.  
Finally, Open Education enables the users to use these tools and include the diversity of each reality on the map.

Data and Information Source: See Map: FOSS4GWorld.org

---

**ICACI** Commission on Open Source Geospatial Technologies  
Chair: Maria Philippa Lourenco | Chair: Maria Philippa Lourenco  
President: Manuel Freije | President: Manuel Freije

**WE MAPS**  
INTERNATIONAL MAP YEAR 2016-2015

**International Geospatial Association**  
Association of Cartographers and Geographers  
ACT



# Google Summer of Code

- Oportunidad ofrecida a OSGeo para proyectos geoespaciales de OSGeo e invitados
- 22 estudiantes aceptados en el año 2016
- **gvSIG Batoví ganador de una beca (ver siguiente presentación)**

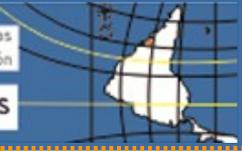


Google Summer of Code @



[https://wiki.osgeo.org/wiki/Google\\_Summer\\_of\\_Code\\_2016\\_Ideas](https://wiki.osgeo.org/wiki/Google_Summer_of_Code_2016_Ideas)





# Dónde encontrar más información

- Página web: <http://www.geoforall.org/>
- Listas de correo: globales y regionales



The screenshot shows the homepage of the Geo for All website. The header features a navigation menu on the left with items: Home, About, Advisory board, How to join, Locations, News, Newsletters, Resources and references, Training, and Webinars. The main content area has a banner that says "Be part of 'Geo for All'" and a mission statement: "Mission - 'Making geospatial education and opportunities accessible to all'". Below the mission statement, it states: "Geo for All" is the Open Source Geospatial Foundation's Open Educational outreach with our partners worldwide with the mission for making geospatial education and opportunities accessible to all. A world map with green dots indicates the location of 111 labs worldwide as of 10th October, 2016. A link for "Geo for All overview presentation" is also visible.





# Dónde encontrar laboratorios integrantes de la red

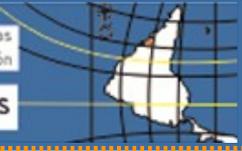
wiki: [http://wiki.osgeo.org/wiki/Edu\\_current\\_initiatives](http://wiki.osgeo.org/wiki/Edu_current_initiatives)

- Tabla de integrantes con enlaces a los laboratorios
- Boletín: laboratorio del mes
- Temas de educación e investigación

University/Higher Education/Schools members

◆	Laboratory name and institution ◆	City ◆	Country ◆	Continent ◆	Coordinates (longitude, latitude) ◆	Application received / Announced ◆	Notes (projects, collaborations, etc) ◆	Contact names ◆	Contact emails ◆
1.	<a href="#">University of Nottingham</a> ◆	Nottingham	UK	Europe	-1.250296, 52.831497			Didier Leibovici	Didier dot Leibovici at nottingham ac uk
2.	<a href="#">University of Girona</a> ◆	Girona	Spain	Europe	2.837305, 41.967426	2012-09-10		Lluís Vicens	lluis at sigte.udg.edu
3.	<a href="#">University of Southampton</a> ◆	Southampton	UK	Europe	-1.396873, 50.936974	2013-04-30		Jason Sadler	osgl at geodata.soton.ac.uk
4.	<a href="#">Czech Technical University in Prague</a> ◆	Prague	Czech Republic	Europe	14.390363, 50.10183	2012-11-23	Geospatial analysis, modeling and visualization, remote sensing, GRASS GIS ◆ and QGIS ◆ development	Martin Landa	martin.landa at fsv.cvut.cz philo iames at ncl.ac.uk (please





# Cómo participar

Tres maneras de participación:

- como **miembros** de la red global: laboratorios académicos
- **socios** de la Industria, el Gobierno, ONGs
- **organizaciones profesionales internacionales** a través de MdE (MoUs)



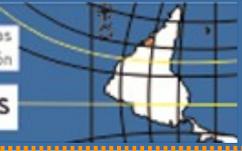


# Cómo unirse

[http://www.geoforall.org/how\\_to\\_join/](http://www.geoforall.org/how_to_join/)

- lee los criterios
- si los cumples, ponte en contacto con un representante regional y describe tus actividades geoespaciales open source
- si te invitan:
  - regístrate en la wiki de OSGeo
  - crea la entrada para tu laboratorio en la tabla wiki
  - únete a la lista de correo
  - enumera tus intereses en investigación y educación
  - participa – consulta [http://wiki.osgeo.org/wiki/Geoforall\\_criteria](http://wiki.osgeo.org/wiki/Geoforall_criteria)





# Cuáles son los beneficios de unirse a GeoForAll

Esa no es la pregunta correcta; deberías preguntar

## Cómo puedo contribuir





# Antoni Pérez Navarro

## co-coordinador

# Grupo Temático Español

# de GeoForAll

E:\geo4all\_saludo.mp4





8vas Jornadas de  
Latinoamérica  
y el Caribe de gvSIG

2das Jornadas de  
Tecnologías Libres  
de Información Geográfica y  
Datos Abiertos



Transformando paradigmas de  
tecnología e información

**¿Preguntas?  
Muchas gracias**

[sergio.acostaylara@mtop.gub.uy](mailto:sergio.acostaylara@mtop.gub.uy)  
[geoforall@lists.osgeo.org](mailto:geoforall@lists.osgeo.org)