

Cristiano Giovando

Geospatial Technology Specialist

Turin

Summary

Cristiano is a technology innovator and mapping specialist at the World Bank. With 15 years of international experience in the field of geographic information, he applies the principles of open data and open source software to disaster risk management and humanitarian projects.

Experience

World Bank Group

Geospatial Technology Specialist

December 2015 - Present (5 years 9 months)

Turin Area, Italy

- Coordination and advising on geospatial technology for World Bank projects in Europe, Africa, Southeast Asia, and the Pacific;
- Management and coordination of GeoNode development contracts;
- Advising on OpenStreetMap technology and data for community mapping projects;
- Development of mapping workflows with UAVs and machine learning technology;
- Management and coordination of aerial survey contracts.

Humanitarian OpenStreetMap Team

6 years 9 months

Senior Technical Advisor

July 2018 - Present (3 years 2 months)

Turin Area, Italy

- Advisor for the "Missing Million" project (in partnership with Oregon State University and Development Seed, funded by NASA) with the objective of mapping informal settlements using crowdsourcing and machine learning;
- Support on imagery related needs for humanitarian mapping projects.

Project Manager

December 2014 - June 2018 (3 years 7 months)

Greater San Diego Area

Top Skills

GIS

Remote Sensing

Spatial Analysis

Languages

Italian (Native or Bilingual)

Spanish (Limited Working)

English (Native or Bilingual)

Publications

An Open Machine Learning Challenge to Map Urban Development and Resilience in Diverse African Cities from Aerial Imagery

Disaster Risk Management Strategy for Mrauk U Cultural Heritage

OpenAerialMap: Empowering Disaster Response and Preparedness Communities with Aerial Imagery

Data Schemas for Multiple Hazards, Exposure and Vulnerability

The Picture Pile Tool for Rapid Image Assessment: a Demonstration Using Hurricane Matthew

- Coordination of the design process and development of OpenAerialMap.org, an open source platform for sharing satellite, aerial and UAV imagery;
- Research and development of crowdsourced damage assessment methods from satellite imagery through the RAD-Crowd and Crowd4SAT projects;
- Design and development of the Pacific Drone Imagery Dashboard (PacDID);
- Led the design and coordinated development of osm-analytics.org

KAjO

Geospatial Technology Consultant

April 2019 - March 2020 (1 year)

Greater Turin Metropolitan Area

Design and development of global exposure datasets derived from OpenStreetMap in support of JRC/EU disaster risk information platforms.

Terrapan Labs

Co-Founder

January 2008 - December 2016 (9 years)

Greater San Diego Area

Terrapan Labs pioneered the development of small unmanned aerial vehicles for mapping. As co-founder and geospatial lead, I was responsible for managing aerial surveys and develop orthoimagery products for engineering, planning and research projects.

Leighton Group

GIS Specialist

2012 - 2014 (2 years)

Greater San Diego Area

GIS design and modeling for geotechnical and environmental projects.

European Commission, Joint Research Centre

Scientific Officer

March 2008 - March 2011 (3 years 1 month)

Ispra, Italy

At the JRC I joined the development team of the European Forest Fire Information System (EFFIS) which provides real-time mapping of wildfires in Europe. I was responsible for the design and development of the new EFFIS portal which includes a modern and user-friendly Web mapping application and for publishing of interoperable geodata services. I also developed automated processing chains for publishing MODIS daily composite mosaics, hotspots, burned areas and aggregated fire news. As part of the fire season operational activity, I supported the European Monitoring Information Centre

(MIC) and member state civil protection agencies with real time reports on major fire events.

SDSU Research Foundation

Research Specialist II

October 2007 - January 2008 (4 months)

Greater San Diego Area

- A 3-month project funded by the White House Office of National Drug Control Policy (ONDCP) with the purpose of developing a prototype spatial decision support system for the Counter-Drug Technology Assessment Center (CTAC);
- As the project coordinator I was responsible for the design and development of the system, including geo-visualization and automatic data mining tools.

HELIX Environmental Planning, Inc.

GIS Specialist

April 2007 - October 2007 (7 months)

Duties: spatial analysis, geoprocessing, map design and production, development and management of GPS data collection workflow. Projects: several habitat mitigation and monitoring plans throughout San Diego County, SDG&E Sunrise Powerlink Project vegetation and alternatives mapping, Environmental Impact Reports (EIR) and permitting.

San Diego State University

Research Assistant

August 2004 - April 2007 (2 years 9 months)

Greater San Diego Area

- Conducted research activities for the REASoN Project, funded by NASA and the U.S. Border Patrol, with the objective of developing a Border Spatial Decision Support System (BSDSS);
- Research tasks included data mining of apprehension records, geo-visualizations, automatic semantic matching of multilingual data sources, migration pattern analysis;
- Dissemination of results through publications and conference presentations.

Global Imaging, Inc

GIS Consultant

January 2006 - June 2006 (6 months)

Web GIS prototyping and development using open source software.

SANDAG

Research Technician

February 2006 - May 2006 (4 months)

While on this temporary appointment, I provided GIS support to the SANDAG Service Bureau, transportation and planning departments. Duties included: data creation, geoprocessing, and cartographic production for the Regional Transportation Plan and Smart Growth Incentive Program.

Geographical Information Systems International Group

GIS Consultant

December 2003 - February 2005 (1 year 3 months)

Coordination of the local node of the Nature GIS project, a thematic SDI for protected areas and nature preservation which was selected as one of the early prototypes for demonstrating the implementation of INSPIRE. Main duties included database design, map server setup, coordination with stakeholders and project partners and dissemination of results.

University College London

Research Assistant

April 2004 - August 2004 (5 months)

London, United Kingdom

- Acquisition, mosaicing and processing of global Landsat and SRTM datasets;
- Design and creation of the ICEDS geoportal (iceds.ge.ucl.ac.uk);
- Setup of OGC compliant WMS and WCS services.

European Commission, Joint Research Centre

Stagiaire

January 2003 - October 2003 (10 months)

Ispra, Italy

- Research on the implementation of OGC standards in Europe;
- Support drafting of the INSPIRE Directive for a European SDI;
- Setup and testing of Web Map Service software compliance.

Studio Arctea

GIS Consultant

October 2002 - December 2002 (3 months)

Turin Area, Italy

- Processed and geo-referenced satellite imagery of Niamey, Niger
- Created landcover classification from satellite and aerial imagery

Education

San Diego State University-California State University
M.S., Geographic Information Science · (2011)

Westfälische Wilhelms-Universität Münster
Exchange Semester, Geo-Informatik · (2005)

Politecnico di Torino
B.S., Geographic Information Systems · (2003)

Universiteit Utrecht
Exchange Semester, Geography · (2002)

Liceo Classico "C. Botta"
Diploma, Maturita' Classica · (1998)

