

PERSONAL INFORMATION

Gagliardi Vittorio

 Viale della Repubblica 77, 87100 - Cosenza (CS), Italy

 (+39) 328 4130170

 v.gagliardi@epsilon-italia.it

Sex Male | Date of birth 31/03/1969 | Nationality Italian

PROFILE

GISSC

WORK EXPERIENCE SUMMARY

M.Sc. Environmental Engineer with 15 years' experience in geographic information systems, spatial data infrastructures and remote sensing applications.

He is deeply involved in the implementation of the INSPIRE (Infrastructure for spatial information in Europe) European Directive, with particular focus on:

- the harmonization/validation of spatial datasets and metadata
- the interoperability of geo-webservices
- the validation and testing of the different SDI components.

He is expert in:

- i) development of techniques for processing satellite remote sensing data for: evaluating the spatial-temporal evolution of the vegetation cover, the territorial control, the environmental monitoring and the management of natural/anthropogenic resources;
- ii) processing remotely sensed optical multi/hyper spectral and radar data, at different spatial resolution;
- iii) development of customised GIS / WebGIS applications

He is teacher and responsible of the management and educational organization of professional GIS training courses, held at the professional orders (engineers, geologists, agronomists) and public institutions (CNR – National Research Council, Provinces, Municipalities).

He is co-responsible for many international geomatics-related projects funded by European Commission, as well as for projects implementing SDIs at local level for Local Authorities.

He is employed in the Environmental Group in the frame of European and National research projects in the field of remote sensing applications and GIS (Geographic Information Systems) development.

WORK EXPERIENCE DETAILED



1999 – on going

Geographic Information Expert

Name of the Company: Epsilon Italia, Italy ([www.epsilon-italia.it](http://www.epsilon-italia.it))

Most relevant projects and customers:

1. Italian Ministry of Infrastructures and Transports, Rome (Italy)

The Geographic Information System of the dams and associated flood risk of the Adige and Tevere river basins.

Dates: March 2015 – December 2015

Business domain: Environment, Geomatics

Roles and responsibilities: Creation and development of the Geographic Information System of the dams and associated flood risk of the Adige and Tevere river basins.

Technologies: QGIS, python

Methodologies / standards: Data modelling, digitization and georeferencing of paper maps, customization of QGIS forms for the editing of the attributes of the geometries.

2. MACPOFIN

“MACPOFIN - Materiali compositi di polimeri e fibre naturali”, co-funded by the Calabria Regional Government in the frame of the Structural Funds of the European Union, Regional Operative Programme – Measure related to the Scientific Research, Technological Innovation and Information Society.

Dates: September 2014 – December 2015  
Business domain: Environment, Geomatics  
Roles and responsibilities: Collaboration of WP2 “Development of remote sensing techniques for the detection of raw material for the production of natural fibers”  
Technologies: Erdas, QGIS  
Methodologies / standards: Classification of multispectral satellite images, confusion matrix.

### 3. “ArcFUEL - Mediterranean Fuel Maps Geodatabase for Wildland & Forest Fire Safety” ([www.arcfuel.eu](http://www.arcfuel.eu))

European project, co-funded by the LIFE+ 2010 Programme with the aim of producing updated fuel cover maps based on satellite data and field validation to fulfil the needs of local, regional or national users in forest fire management operations..

Dates: October 2011 – December 2013  
Business domain: Environment, Geomatics  
Roles and responsibilities: Co-responsible for the geodatabase design in conformity with the INSPIRE relevant data specifications and for the development and test of the remote sensing applications in Italy.  
Technologies: Matching tables, Enterprise Architect, Oxygen XML Editor, HALE studio  
Methodologies / standards: INSPIRE data harmonization / INSPIRE Implementing Rules and Technical Guidelines, ISO 191xx standards, OGC standards. Field validation.

### 4. Other projects and clients

Dates: 1999 – 2013  
Business domain: Environment, Geomatics  
Roles and responsibilities: Collaborator of Epsilon Italia

- "3D-Aerodromes - 3-Dimensional Airport & Vicinity Geodatabase: A Product for the General Aviation Industry" is a project funded by the European Commission Eurostars Programme and the R&D funds contributed by the three Member States of Germany, Greece and Italy. It was initiated in 2010 and will be completed in 2013. 3D-Aerodromes delivers: (i) the software technology to produce three dimensional Aerodrome Navigational Databases for the General Aviation; a technology for the integration of satellite imagery and other remote sensing data, terrain and obstacle data, navigation data and CAD data of airports; and (ii) for 50 European airports template databases will be created that serve as the basis for a standardization of 3D airport and airport environment data. These data provide an important basis for 3D visualization and navigation purposes in the air and on the ground and support the pilot through the so-called Synthetic View on the cockpit instruments.
- SEIS-MALTA – Implementation of the Maltese component of the SEIS (Shared Environmental Information System) for the themes Air, Water, Soil, Noise, Radiation. In this project, awarded by MEPA (Malta Environment & Planning Authority) to Epsilon International SA, Epsilon Italia is responsible for the design of a SQL Server geodatabase enabling the datasets compliance against the relevant INSPIRE Data Specifications.
- "Soil moisture assessment from microwave satellite remote sensing", carried out in the frame of the agreement signed with the Engineering Faculty of University of Calabria and finalised to host training stages for degree and PhD thesis.
- Evapotranspiration assessment from optical satellite remote sensing, in the frame of the collaboration agreement with CAMILAB (Automatic Cartography and Hydrogeological Modelling Laboratory) of the Department of Soil Conservation of the University of Calabria (IT), addressed to R&D activities related to remote sensing applied to hydrology.
- "Spatial-temporal evolution of the vegetation cover by means of satellite remote sensing techniques", carried out in the frame of the agreement signed with the Engineering Faculty of University of Calabria and finalised to host training stages for degree and PhD thesis.
- "Remote Sensing Thematic Laboratory for marine applications", funded by Calpark (Scientific and Technological Park of Calabria) and MIUR (Italian Ministry of University and Research).
- "ArcFIRE", design and development of a custom webgis-based sw platform supporting the forest fire management, based on the integration of multi-source real-time and off-line data and of physical-mathematical models for the prevention, prevision, management of the emergencies, impact assessment. The integration is carried out in ESRI environment and the development is carried out in .NET environment.
- "Galileo", a technology transfer project in which he designed and developed a webgis platform for vessels near-real time position tracking and marine touristic geospatial information, based on the use of mashup technologies between ESRI ArcGIS Server and Google Maps API.
- "MED\_ISOLAE-3D – Mediterranean Islands 3D Aerial Navigation", funded by DG Information Society and Media of European Commission in the frame of the econtentplus Programme and co-ordinated by Epsilon International SA.
- "MED-ISOLAE - Design and realisation of a SDI (Spatial Data Infrastructure) for Mediterranean islands, applying the OGC standards and both proprietary and open-source software solutions. This activity is carried out in the frame of the INTERREG III-B ARCHIMED "".
- "SIPITEC2", the design and development of the GIS and WEBGIS of the Territorial Coordination Plan of the Province of Cosenza.
- Enhancement of the Geoportal of the Planning Department of the Province of Cosenza, consisting in the creation of a data model for the PSC/PSA (Structural and Associated Municipality Plans) in conformity to the Regional Urban Law and related Guidelines and in the development of a procedure for the on-line editing of the PSC/PSA based on the use of the OGC WFS-T protocol.
- "MIRASAT – A Methodology for the assessment of Indicators of Environmental Risks by means of Satellite Remote Sensing Techniques" – funded by the Scientific Research Department of the Calabria Region.
- "ISPARIDE – Identification and Assessment of Parameters to evaluate the Desertification Risk", a research project co-ordinated by the Italian National Research Council – Institute for the Hydrogeological Protection and funded by the Italian Ministry of Research and University.
- "Development of a methodology for the detection of contaminated sites by means of satellite remotely sensed data and Artificial neural networks", a Research project carried out in co-operation with the Department of Soil Protection of University of Calabria, funded by ASI (Italian Space Agency) in the frame of the Fundamental Research Programme 2000 and 1999.

- Evapotraspiration assessment from optical satellite remote sensing, in the frame of the collaboration agreement with CAMILAB (Automatic Cartography and Hydrogeological Modelling Laboratory) of the Department of Soil Conservation of the University of Calabria (IT), addressed to R&D activities related to remote sensing applied to hydrology.
- "Remote Sensing Thematic Laboratory for marine applications", funded by Calpark (Scientific and Technological Park of Calabria) and MIUR (Italian Ministry of University and Research).
- A pilot GIS application for the consortium Sibaritide-Pollino", Piano Telematico Calabrese (TELCAL).
- "Realisation of a WebGIS application for the hydraulic urban network management for the 12 Municipalities involved in the consortium A.C.E.A. located in Castrovillari (CS)", Kreade Inno snc.
- "SGRI – Assessment of Sustainability of the Management of the Water Resources", a Research Project in partnership with the Department of Soil Protection of University of Calabria. (consultant)
- "Design and realization of WEBGIS applications for the management hydro geological and meteorological data. Civil Protection Department of Regione Calabria (IT)" - Loc. Germaneto (CZ) – IT.

06/2001 – 06/2002 **External Senior Consultant**

University of Calabria – Department of Soil Protection "Vincenzo Marone"

Ponte Pietro Bucci, I – 87036 Arcavacata di Rende (CS)

Responsible of the research project "Modellistic-experimental study of the hydrologic balance in the pilot basin of Turbolo".

02/1997 – 12/2002 **External Senior Consultant**

University of Calabria – Department of Soil Protection "Vincenzo Marone"

Ponte Pietro Bucci, I – 87036 Arcavacata di Rende (CS)

Collaboration with the Groundwater Hydrology Research Group of Prof. Salvatore Troisi, in the field of groundwaters flow and transport modelling, with applications to contaminated sites remediation problems

02/2001 – 10/2003 **External Senior Consultant**

CALPARK – Scientific and Technological Park of Calabria - 87036 Arcavacata di Rende (CS)

Collaboration in the frame of the Research Project SERVIR – Remote Sensing Thematic Laboratory for marine applications.

## EDUCATION AND TRAINING

June 2011 **GML fundamentals, GML Hand On**

Professional Training

Snowflake Software Ltd, Southampton (United Kingdom)

UML Data Models, GML Application Schema creation and mapping, Schema Validation, WFS deployment, use of data modelling software such as Enterprise Architect, Shapechange, GO Publisher.

2006 Certification “Intergraph Certified Developer for GeoMedia Desktop solutions” for the realisation and development of Geographic Information Systems (certification n° 1328)  
Intergraph Corporation (USA)

Professional Training

Design and realisation of GIS

February 2002 PhD in Hydraulic Engineering for the Environment and the Territory. XV cycle.

University Training

University of Calabria – Department of Soil Protection “Vincenzo Marone”  
Ponte Pietro Bucci, I – 87036 Arcavacata di Rende (CS)

Thesis title: “A mathematical model for the variably saturated flow based on the cells method. Application to the basin of the Turbolo torrent”.

October 2000 Scholarship: “Study finalised to the assessment of the vulnerability of the aquifers of the province of Cosenza”.

University Training

Province of Cosenza – II Sector Environmental Protection

Assessment of the vulnerability level for the aquifers

October 1996 Master's degree in Civil Engineering

University Training

University of Calabria – Department of Soil Protection “Vincenzo Marone”  
Ponte Pietro Bucci, I – 87036 Arcavacata di Rende (CS)

Thesis title: “Construction of a mathematical model for the simulation of the groundwaters based on the cells method. Applications”.

PERSONAL SKILLS



Mother tongue(s) Italian

Other language(s)

UNDERSTANDING

SPEAKING

WRITING

Listening

Reading

Spoken interaction

Spoken production

English

B1

B2

B1

B1

B2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user / Common European Framework of Reference for Languages

Communication skills

I am able to work with other people thanks to the participation in several international projects carried out with Epsilon Italia srl.

Organisational / managerial skills

I am able to coordinate and administrate people, projects and budgets at work and in the frame of professional personal contracts.