



Curriculum vitae

PERSONAL INFORMATION

Stefano Bagli



SHORT BIO

MSc. Eng. Stefano Bagli, PhD

is an environmental, data scientist, geospatial engineer, CEO and Founder of GECOSistema srl (www.gecosistema.com) and SaferPLACES (www.saferplaces.co).

He succeeded in two PhDs titles at Alma Mater Studiorum - University of Bologna Italy (2015 in Environmental and Civil Engineering and 2001 in Environmental and Chemical Engineering) and a post-doc at JRC EU (2002).

He was Professor at University of Trento, Faculty of Engineering, Environmental Engineering Course of Methods for Environmental Assessment during the period 2008-2010.

In 2009 He was the tutor of Summer school in Geography of Tourism: "Spatial Decision Support Systems (SDSS) for Tourism Planning".

He has more than 25 years of experience in environmental fate and transport modelling (air, hydrology, water, groundwater, noise), development of cloud-web geospatial application (GIS, SDSS, Web GIS) and data science (AI) in the field of environmental, climate services and natural disaster (flood) risk intelligence.

He is proficient programmer in Python language with depth knowledge of geospatial, AI/ML, climate and data science libraries.

From 2011, as CEO of GECOSistema, has been coordinator and project manager of several EU funded research projects (FP7, H2020, Horizon Eu) with the purpose to develop and launch in the market innovative research-based products and services

- EU HORIZON EUROPE ARCADIA
- EU HORIZON EUROPE DIRECTED
- EU H2020 I-CISK
- PROTECT Horizon EU
- EU FP7 SWITCH-ON
- H2020 CLARA
- H2020 SYSTEM-RISK
- ECMWF SWICCA
- ECMWF C3S Pluvial Risk
- Innovation projects (Province BZ funding):
MONALISA, AWESOME

As CEO of GECOSistema srl, was project leader and coordinator of project SaferPLACES founded by EIT Climate-KIC (2018-2021) focused on pluvial urban flood risk assessment

From 2007 is active in the field of Renewable energy power plant design and permitting

- GECOHydro Marecchia River Power Plant
- RiminiWIND OffShore WindPark

WORK EXPERIENCE

September 2001 – Present

CEO-Co-Founder GECOSistema srl

Piazza Malatesta 21 - 47923 Rimini (RN) - Italy

Project Management, Business Development

www.gecosistema.com

- Data Science , Earth Observation and geospatial data
- GIS, Environmental Modeling, Decision Support Systems
- Environmental Impact Assessment, Human Health Risk Assessment
- Hydroinformatics, Hydrology and water management
- Pluvial, Fluvial and Coastal Risk Assessment and hydrodynamic modeling
- Air Dispersion and Meteorological modeling
- Renewable energy power plant: hydro power, OffShore Wind Farm (RIMINIWIND Project),

January 2022 – Present

CEO-Co-Founder SaferPLACES

Piazza Malatesta 21 - 47923 Rimini (RN) - Italy

Project Management, Business Development

saferplaces.co , platform.saferplaces.co

- AI-based Digital Twin Solution for flood risk intelligence in urban ares
- AI and ML for flood risk assessment
- Urban Digital Twin
- Big Open Climate and Geospatial Data
- SaaS
- Cloud Web Platform

March 2002 – March 2002

JRC EU Post Doctoral

European Commission,

Institute for Environment and Sustainability - Ispra (VA) Italy

- Agro-pedo-climatological homogeneous zoning of Italy: Developing a GIS Methodology for the definition of crop yield homogeneous zones over Italy.
- Automatic Feature Extraction from Landsat Image2000 (<http://image2000.jrc.it/>) : automatic clouds and shadows removal, coastline and lake boundaries extraction, river network delineation using Morphological Image Analysis (MIA), DEM and SRTM processing, automatic mosaicing procedure.

Business or sector European institution

September 2008 – September 2010

University of Trento -Italy Contract Professor

Faculty of Engineering,

Course of Methods for Environmental Assessment

EDUCATION AND TRAINING

2011–2014

PhD - Thesis Title: "A WEB GIS DECISION SUPPORT SYSTEM FOR COASTAL RISK ASSESSMENT AND MITIGATION PLANNING"

Alma Mater Studiorum -University of Bologna, PhD in Environmental and Civil Engineering

- Coastal Flooding
- Web GIS and SDSS
- Hydrodynamic
- Spatial Multicriteria Analysis

1998–2001

PhD - Thesis Title: "EIHRA-GIS A Spatial DSS for Environmental and Human Health Risk Assessment "

Alma Mater Studiorum -University of Bologna, PhD in Environmental and Chemical Engineering

- Human Health Risk Assessment
- Web GIS and SDSS
- Fate and Transport Modeling

1991–1997

Master of Science in Environmental Engineering

Alma Mater Studiorum -University of Bologna

- Environmental Modeling
- Risk Assessment
- Hydrology, Hydraulic

PERSONAL SKILLS

Mother tongue Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
French	B1	B1	A2	A2	A2

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills

- team work: I have worked in various types of teams from research teams to engineering company. I was project leader and coordinator of SaferPLACES an EIT-Climate research funded project with 1,8Meuro budge and 7 partners.
- GECOsistema's CEO and Business Development with a team of 7 people.
- mediating skills: I'm frequently involved in co-supervise internship, master and PhD Students

Organisational / managerial skills

- CEO and Business Developer at GECOsistema srl and SaferPLACES

Digital competences

SELF-ASSESSMENT

Information Processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital competences - Self-assessment grid

Computer skills

- OS - macOS, windows, Linus
- Python Programming
- Jupyter Notebbok and Colab
- Geospatial Libraries: GDAL, geopandas, lefmap
- Numpy, xarray, numba, dask
- AI/ML : Scikit-learn, tensorflow, keras, pytorch
- Cloud Computing, Docker, Kubernet

Other skills

Alpine and Rock Climbing, Surf, Love traveling and adventuring around the globe .

Driving licence

B

PUBLICATIONS

- [1] L Martelli, M Filippini, S Bagli, P Severi, and F Tomasetti. "Seismic risk reduction: a local effects map for territorial and urban planning. The example of the Rimini Territorial Plan". In: *Boll Geofis Teor Appl* 48.2 (2007), pp. 151–162.
- [2] S Bagli and G Spadoni. "A multimedia, multiple pathway exposure and risk assessment using EHHRA-GIS: a real case of contamination due to an industrial facility". In: *WIT Transactions on Ecology and the Environment* 45 (2000).
- [3] Davide Geneletti, **Stefano Bagli**, Paola Napolitano, and Alberto Pistocchi. "Spatial decision support for strategic environmental assessment of land use plans. A case study in southern Italy". In: *Environmental Impact Assessment Review* 27.5 (2007), pp. 408–423.

