Europass CurriculumVitae	
Personal information	
First name / Surname	**Francesco Petrosino**
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E-mail	petrosino@geogaia.it; web: www.geogaia.it – Linkedin: https://www.linkedin.com/in/francesco-petrosino-a66a0840/
Nationality	Italian
Date of birth	22.07.1968
Gender	male
Occupational field	**Engineering Geology - Geology - Gis Analyses –Geomorphology – DRR -Consultancy – UAV pilot – Lidar analyst**
Main Work experience	
Dates	**2000 - 2025 onward**
Occupation or position held	Consultant Engineering Geologist - Geologist - Geomorphologist- Gis Analyst – Hydrogeologist
Main activities and responsibilities	Management of ground investigations: desk study (including walkover and survey), design and procurement, site supervision and interpretative reporting, exploration and geological survey; GIS based analysis and mapping of geoenvironmental hazard; digital cartography, geological geomorphological hydrogelogical digital mapping, geospatial analysis and database building and correlation, Remote Sensing, Lidar survey and analysis, geotechnical engineering, geological logs analisys, stability assessment of soil & rock slopes including GIS analysis and mapping of areas prone to landslides and seismic hazard, engineering geological mapping of landslides, analysis of slope stability, assessment of suitability of soils and rock;
Name and address of employer	Studio G.A.I.A. (www.geogaia.it) Salerno – Italy – Associated Consultant
Dates	**2024 onward**
Occupation or position held	Professional Consultant Geologist and Gis Analyst
Main activities and responsibilities	*Hazard Seismic Microzoning and for Italian municipalities - 3st level phase – for the National Civil Protection Dept. hazard seismic project* Geological, geomorphological, hydrogeological survey, collecting and GIS analysis/mapping of geodatas, Remote Sensing and Lidar analysis, analysis of aerophotos, analisys of geophisical datas, interpretation of geological logs and geophisical datas, GIS analysis/mapping of geodatas at very large scale 1:2000/1:5000 of first level seismic microzonation maps and 3rd level seismic microzonation maps, digital cartography, geological geomorphological hydrogelogical digital mapping, geospatial analysis and database building and correlation, GIS analysis and mapping of areas prone to landslides and seismic hazard,writing reports, QA/QC, partecipation to techinical meetings. Level 3 seismic microzonation maps associate a numerical quantification of seismic motion amplification to the zones or parts of zones identified on the Map of homogeneous microzones from a seismic perspective. These numerical quantifications permit the following maps to be drawn up: - map of stable zones and stable zones susceptible to local amplification, characterised by amplification factors; - map of zones with permanent deformation, characterised by quantity parameters. - Overlapping these two maps gives a level 3 seismic microzonation map.
Name and address of employer	Napoli/Pozzuoli metropolitan city – municipal area
Dates	**2024 onward**
Occupation or position held	Professional Consultant Geologist and Gis Analyst
Main activities and responsibilities	GIS Elaboration and analysis for the national project of environmental strategy plan for Italian maritime areas
Name and address of employer	SOGESID S.P.A. – in house providing company for Ministry of Environment and Energy
Dates	**2023**
Occupation or position held	Consultant Engineering Geologist - Geologist - Geomorphologist- Gis Analyst
Main activities and responsibilities	Technical support to National Civil Protection Dept for the November 2022 landslides and flood emergency in Casamicciola – Ischia. Managing of geodatas, geological and geomorphological local surveys and support to engeneers for the production of a damage maps
Name and address of employer	Struttura Tecnica Nazionale (STNitalia) and Italian National Civil Protection Dept.
Dates	**2022**
Occupation or position held	Professional Consultant Engineering Geologist - Gis Analyst – UAV Lidar and analysis

Main activities and responsibilities	Geostructural surveys for the stability analysis along a rock slope and identification of potential rockfall sources using UAV-derived point cloud from Matrice300RTK- L1 lidar data survey
Name and address of employer	Private customer
Dates	**2022**
Occupation or position held	Professional Consultant Engineering Geologist - Gis Analyst – UAV Lidar and analysis
Main activities and responsibilities	Geological and geomorphological survey for the stability analysis along a lanslide using UAV- derived point cloud from Matrice300RTK- L1 lidar data survey
Name and address of employer	Ausino S.P.A. Servizi Idrici – public water management dept
Dates	**2022**
Occupation or position held	Professional Consultant Engineering Geologist - Gis Analyst – UAV Lidar and analysis
Main activities and responsibilities	*Project for the rehabilitation of landslides areas in Scanno - Italy* Geological, geomorphological, hydrogeological survey, Remote Sensing and Lidar analysis, analysis of aerophotos, GIS analysis and mapping of landslilde susceptibility, collecting and GIS analysis mapping of geodatas at very large scale 1:2000/1:5000, geospatial analysis and database building and correlation, arranging and supervising geological drillings and geothecnical in situ tests, supervising geophisical in situ tests, performing and interpretation of geological logs, geophisical logs and sections, monitoring landslide movements, partecipation to techinical meetings,QA/QC, writing reports for the project of rehabilitation of landslides.
Name and address of employer	Scanno municipality - Italy
Dates	**2021**
Occupation or position held	Professional Consultant Geologist and Gis Analyst
Main activities and responsibilities	GIS Elaboration and analysis of weather-climatic data to define crop needs for the purpose of defining water requirements at the basin scale; processing of geographic data and information layers each at the scale of the hydrographic sub-basins of the river Po District, highlighting the connection between the invested areas and the source, complete with the code of the water body on which it insists; technical support for verifying the state of implementation of the measures relating to the environmental objectives related to water contained in the Water Management Plan of the River Po National District Authority
Name and address of employer	C.R.E.A Council for Agricultural Research and Economics – Ministry of Agricultural, Food and Forestry Policies -Italy
Dates	**2013 on going**
Occupation or position held	Professional Consultant Engineering Geologist - Gis Analyst
Main activities and responsibilities	*Hazard Seismic Microzoning and for Italian municipalities - 1st level phase – for the National Civil Protection Dept. hazard seismic project* Geological, geomorphological, hydrogeological survey, collecting and GIS analysis/mapping of geodatas, Remote Sensing and Lidar analysis, analysis of aerophotos, analisys of geophisical datas, interpretation of geological logs and geophisical datas, GIS analysis /mapping of geodatas at very large scale 1:2000/1:5000 of first level seismic microzonation maps, digital cartography, geological geomorphological hydrogelogical digital mapping, geospatial analysis and database building and correlation, GIS analysis and mapping of areas prone to landslides and seismic hazard, writing reports, QA/QC ,partecipation to techinical meetings. Level 1 seismic microzonation map (Map of homogeneous microzones from a seismic perspective): a map that identifies the zones where, based on lithostratigraphic and geomorphologic characteristics, it is possible to forecast homogeneous behaviour in the event of an earthquake. The microzones indicated on the map are classified according to 3 categories: A) stable zones, where no significant local effects of any nature are assumed (outcropping geological bedrock with flat or slightly inclined morphology – slopes with a gradient of less than 15 degrees); B) stable zones prone to local amplification, where the amplification of seismic motion is expected (as a consequence of local lithostratigraphic and morphological conditions); C) zones prone to instability, where expected and predominant seismic effects may be ascribed to permanent deformations of the investigated area (motion amplification phenomena are not necessarily excluded).
Name and address of employer	Regional Municipalities and Italian National Civil Protection Dept.
Occupation or position held	Professional Consultant Engineering Geologist - Gis Analyst
Dates	**2018**
Occupation or position held	Professional Consultant Engineering Geologist - Gis Analyst

Main activities and responsibilities	*Hazard Seismic Microzoning for Italian municipalities - 3st level phase – for the National Civil Protection Dept. hazard seismic project – Polla Municipality* Geological, geomorphological, hydrogeological survey, collecting and GIS analysis/mapping of geodatas, Remote Sensing and Lidar analysis, analysis of aerophotos, analisys of geophisical datas, interpretation of geological logs and geophisical datas, GIS analysis/mapping of geodatas at very large scale 1:2000/1:5000 of first level seismic microzonation maps and 3rd level seismic microzonation maps, digital cartography, geological geomorphological hydrogelogical digital mapping, geospatial analysis and database building and correlation, GIS analysis and mapping of areas prone to landslides and seismic hazard,writing reports, QA/QC, partecipation to techinical meetings. Level 3 seismic microzonation maps associate a numerical quantification of seismic motion amplification to the zones or parts of zones identified on the Map of homogeneous microzones from a seismic perspective. These numerical quantifications permit the following maps to be drawn up: - map of stable zones and stable zones susceptible to local amplification, characterised by amplification factors; - map of zones with permanent deformation, characterised by quantity parameters. - Overlapping these two maps gives a level 3 seismic microzonation map.
Name and address of employer	Polla Municipality –Italy - Italian National Civil Protection Dept.
Dates	**2016-2017**
Occupation or position held	Professional Consultant Engineering Geologist - Gis Analyst
Main activities and responsibilities	*Project for the rehabilitation of landslide and flood area on a regional road in Benevento-Italy* Geological, geomorphological, hydrogeological survey, Remote Sensing and Lidar analysis, analysis of aerophotos, GIS analysis of landslilde susceptibility, collecting and GIS analysis/mapping of geodatas at very large scale 1:2000/1:5000, digital cartography, geological geomorphological hydrogelogical digital mapping, geospatial analysis and database building and correlation arranging and supervising geological drillings and geothecnical in situ tests, supervising geophisical in situ tests, performing and interpretation of geological logs, geophisical logs and sections, partecipation to techinical meetings, QA/QC, writing reports for the project of rehabilitation of landslides and flood areas.
Name and address of employer	Amministrazione Provinciale di Benevento- Regional Administration
Dates	**2014-2015**
Occupation or position held	Gis Analyst
Main activities and responsibilities	*Project for a GIS on national gas network* Digital cartography, Georeference and digitize of gas network map, QA/QC , partecipation to techinical meetings, writing reports for the project.
Name and address of employer	Private Customer - Italy
Dates	**2013-2014**
Occupation or position held	Professional Consultant Engineering Geologist - Gis Analyst
Main activities and responsibilities	*Project for the rehabilitation of landslide areas in Novi Velia (Sa)- Italy* Geological, geomorphological, hydrogeological survey, Remote Sensing and Lidar analysis, analysis of aerophotos, GIS analysis of landslilde susceptibility, collecting and GIS analisys/mapping of geodatas at very large scale 1:2000/1:5000, digital cartography, geological geomorphological hydrogelogical digital mapping, geospatial analisys and database building and correlation arranging and supervising geological drillings and geothecnical in situ tests, supervising geophisical in situ tests, performing and interpretation of geological logs, geophisical logs and sections, partecipation to techinical meetings, QA/QC, writing reports for the project of rehabilitation oflandslides.
Name and address of employer	Novi Velia Municipality -Italy
Dates	**2010**
Occupation or position held	Professional Consultant Engineering Geologist - Gis Analyst
Main activities and responsibilities	*Project for the rehabilitation of landslide areas in Fisciano - Italy*. Geological, geomorphological, hydrogeological survey, Remote Sensing and Lidar analysis, analysis of aerophotos, GIS analusis of landslilde susceptibility, collecting and GIS analisys/mapping of geodatas, digital cartography, geological geomorphological hydrogelogical digital mapping, geospatial analysis and database building and correlation at very large scale 1:2000/1:5000, arranging and supervising geological drillings and geothecnical in situ tests, supervising geophisical in situ tests, performing and interpretation of geological logs, geophisical logs and sections, partecipation to techinical meetings, QA/QC, writing reports for the project of rehabilitation of landslides.
Name and address of employer	Private Customer - Italy
Dates	**2009**
Occupation or position held	Professional Consultant Engineering Geologist

Main activities and responsibilities	*Project for the costruction of a power plant (TERNA) in Prata Principato Ultra - Italy* Geological survey field director, arranging and supervising geological drillings, in situ geothecnical tests, in situ hydrogeological tests, collecting samples, performing geological logs, management of logistics, partecipation to techinical meetings, writing reports
Name and address of employer	Private Customer - Italy
Dates	**2007**
Occupation or position held	Professional Consultant Engineering Geologist - Hydrogeologist- Gis Analyst
Main activities and responsibilities	*Project for Municipality New Sewers plan - Salerno – Italy*. Geological, geomorphological, hydrogeological survey, collecting and GIS analisys/mapping of geodatas at very large scale 1:2000/1:5000, analysis of aerophotos, GIS analysis of geodatas, digital cartography, geological geomorphological hydrogelogical digital mapping, geospatial analisys and database building and correlation arranging and supervising geological drillings and geothecnical in situ tests, supervising geophisical in situ tests, performing and interpretation of geological logs, geophisical logs and sections, partecipation to techinical meetings, QA/QC, writing reports for the Municipality New Sewersplan.
Name and address of employer	Private Customer - Italy
Dates	**2006**
Occupation or position held	Professional Consultant Geologist- Gis Analyst
Main activities and responsibilities	*Project for Mattinata Urban Development Plan – Italy* collecting and digital mapping of geodatas, analysis of aerophotos, GIS analysis of geodatas, digital cartography, geological geomorphological hydrogelogical digital mapping, geospatial analysis and database building and correlation, partecipation to techinical meetings.
Name and address of employer	Private Customer - Italy
Dates	**2002/2005**
Occupation or position held	Professional Consultant Geologist - Gis Analyst
Main activities and responsibilities	*Project for the Landslides Hazard Mapping of The Regional Basin Authority for Cilento Area – Italy* Geological, geomorphological survey, Remote Sensing and Lidar analysis, analysis of aerophotos, GIS analysis of geodatas, mapping of landslides hazard at large scale 1:5000/1:10.000, digital cartography, geological geomorphological hydrogelogical digital mapping, geospatial analysis and database building and correlation partecipation to techinical meetings, writing reports for the *Landslides Hazard*.
Name and address of employer	Italian Regional Basin Authority
Dates	**1999 - 2001**
Occupation or position held	Professional Consultant Geologist - Gis Analyst
Main activities and responsibilities	*Project for the Coastal Erosion Hazard Mapping of The Regional Basin Authority for Cilento Area – Italy* Geological, geomorphological survey, Remote Sensing and Lidar analysis, analysis of aerophotos, GIS analysis of geodatas, mapping of coastal erosion hazard at large scale 1:5000/1:10.000, digital cartography, geological geomorphological hydrogelogical digital mapping, geospatial analysis and database building and correlation, partecipation to techinical meetings, writing reports for the *Coastal Erosion Hazard*.
Name and address of employer	C.U.G.RI - University of Salerno – Italy
Education and training	
Dates	**2021**
Title of qualification awarded	Professional Course
Principal subjects	Training Online Course on SAR and SAR Interferometry – Basic and Advanced module - SARPROZ
Name and type of organisation	EO59 slc
Dates	**2020**
Title of qualification awarded	Professional Course
Principal subjects	Spatial Data Analysis with ArcGIS Desktop
Name and type of organisation	GEO University online learning
Dates	**2020**
Title of qualification awarded	Professional Course
Principal subjects	SAR-401: Synthetic Aperture Radar: Hazards
Name and type of organisation	UAF - University of Alaska Fairbanks - edX verified certificate
Dates	**2020**
Title of qualification awarded	Professional Course
Principal subjects	Environment and climate change in international cooperation - Expert in environmental mainstreaming techiques
Name and type of organisation	VIS -International Volunteer Service for Development
Dates	**2019**
Title of qualification awarded	Advanced Webinar
Principal subjects	SAR for Disasters and Hydrological Applications
Name and type of organisation	NASA ARSET -Applied Remote Sensing Training

Dates	**2019**
Title of qualification awarded	Professional Course
Principal subjects	Remote Sensing and Sentinel 2 satellite
Name and type of organisation	TerreLogiche srl -Roma -Italy
Dates	**2019**
Title of qualification awarded	Professional Course
Principal subjects	Earthquake Seismology
Name and type of organisation	Federica.eu (University of Naples Federico II) - edX verified certificate
Dates	**2016**
Title of qualification awarded	Professional Course
Principal subjects	Geological and geomorphological cartography and survey
Name and type of organisation	The Italian Institute for Environmental Protection and Research, ISPRA– Roma- Italy
Dates	**2014**
Title of qualification awarded	Professional Course
Principal subjects	Landslide, flood and alluvial hazard scenarios to prevent disaster. DRR management
Name and type of organisation	Regiona Civil Protection School "E. Calcara" – Napoli - Italy
Dates	**2007 - 2008**
Title of qualification awarded	Workshops
Principal subjects	Landslides risk: theory, zoning and mitigation (2007) Landslide Quantitative Risk Assessment: state of the art and perspectives (2008)
Name and type of organisation	LARAM International School – University of Salerno
Dates	**2006-2007**
Title of qualification awarded	Postgraduate Fellowship
Principal subjects	Study of a GIS application in irrigation management / Surveys, field activity, G.I.S. analisys
Name and type of organisation	Department of Agricultural Engineering and Agronomy; University of Naples " Federico II" ITALY-Ref : Prof. Phd . Guido
Dates	**2001**
Title of qualification awarded	Professional course
Principal subjects	Use of gis systems and software for 3d analysis for data management
Name and type of organisation	SIGEA - ITALY
Dates	**1998-1999**
Title of qualification awarded	Professional course
Principal subjects	Management of the coastal strip and the port system
Name and type of organisation	University of Salerno -ITALY
Dates	**1989-1994**
Title of qualification awarded	Geology degree (Italian Laurea – equivalent at Msc)
Principal subjects	Geology, Engeneering geology, Geomorphology, Hydrogeology, Geological Survey, Cartography, Geotechincal Engeneering, Risk Management, with degree thesis in Volcanological Survey of Lipari Island -Sicily.
Name and type of organization	University of Naples "Federico II" - ITALY
Personal skills and	
Mother tongue	**Italian**
Other languages	

Self-assessment		**Understanding**				**Speaking**				**Writing**	
European level (*)		**Listening**		**Reading**		**Spoken interaction**		**Spoken production**			
English		C1	Proficient user	C2	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient
Spanish		B2	Independent user	B2	Independent user	B1	Independent user	B1	Independent user	A2	Basic user

(*) Common European Framework of Reference for Languages

Social skills and competences	team work, good communication skills, love to independent travel and easy adapting to multicultural environments. On line Volunteer for ***URISA GisCorps*** – DPRK project for iMMAP\WFP - Digitizer and QC member, Member of HOT working committee for Urisa GisCorps. Volunteer GIS Geologist on site for the Central Italian Earthquake 2016 Emergency with National Geologist Council, to build a damage map with Qgis plug in Erikus. On line Volunteer Nepal and Afghanistan earthquakes emergency for HOT OSM.

Computer skills and competences and technical equipment	excellent knowledge • Windows e IOS; • G.I.S. (ArcView 3.X, ArcGis 10.X, open source QGis 3.x), Autodesk Map, Raster Design; • GPS app (Ozi Explorer, Esri ArcPad, Garmin, Qfield, Mapit); • Geolgical softwares: Suite Geostru (perpetual licence), Geoexplorer fot HVSR (perpetual licence); • Photogrammetry and LIDAR Softwares: Agisoft Metashape e PIX4D, DJI Terra (perpetual licence), Greenvalley LIDAR360 (perpetual licence), Cloud Compare; • Remote Sensing softwares: SARPROZ for InSAR, SNAP 8.0 for multispectral analysis; • MS Office, Corel Draw, Macromedia FreeHand, Adobe Photoshop e Premiere, Front Page. UAV Italian Pilot Certification (EASA) Owner of technical equipment: • **DJI Matrice 300 RTK with Lidar Zenmuse L1,** UAV for Lidar and photogrammetry • **DJI Mavic 4 Enterprise RTK,** UAV for photogrammetry • **digital tromographer Geobox 4,5 hz SARA INSTRUMENTS,** for geophisical analysis HVSR; • **Pc:** processor AMD Ryzen 7 3800x, Ram DDR4 80gb, GPU Geforce RTX 3060 12gb, Hd ssd 1Tb e 4tb seconday, NAS 2 tb, double monitor 32 inch each • **Notebook:** MSI MSI PS63 Modern, Intel Core i7 8565U, 16GM RAM, 512GB NVMe SSD,GPU Nvidia GTX 1650 Max-Q GDDR5 4GB
Additional information and pubblications	Member of Italian Professionale Geologist Network (Ordine Nazionale dei Geologi) Member of EGU- European Geoscience Union; Memeber ot EcorisQ – International Association for Natural Hazard Management Publication: Alfinito A., Adinolfi R., Negro D. **Petrosino F.** (2008) "Un esempio di difesa dall'erosione costiera e mitigazione del danno indotto da interventi antropici lungo un piccolo tratto di spiaggia del Comune di Salerno" Atti Convegno "Coste: Prevenire, Programma, Pianificare" – Maratea – 15-17/05/08 pag. 69,79 – Coastal erosion risk, hazard mapping and engineering geology. A.VV. "I presidio idrogeologico del territorio in Campania, zona di allertamento 3; attività di addestramento e laboratorio "Tecnici per il presidio idrogeologico del Territorio" D.G.R. n. 208 del 28/06/2013 – A – "scheda relativa al comune di Cava dé Tirreni – Sa a cura del geologo Francesco Petrosino e del Ing. Francesco Bonadies - Edistampa Sud S.r.l. 2015. Hazard landslides mapping, Risk Analisys , Disaster Risk Reduction Management.