



MARGONARI LILIANA

GIS SPECIALIST & GEOSPATIAL DATA ANALYST

CONTACT ME

- Ciudad Autonoma de Buenos Aires, Argentina
- +549 11 2288-2357
- liliana.margonari@hotmail.com
- <https://blog-glaciologist.netlify.app> (in progress)

FOLLOW ME

- in/lilismargo
- ig/littlemargo

LANGUAGES

- SPANISH ● ● ● ● ●
- ENGLISH ● ● ● ● ●

SKILLS

- ArcGIS - QGIS ● ● ● ● ●
- Python - SQL - R ● ● ● ● ●
- GPS & Total Station ● ● ● ● ●
- Excel - Power BI ● ● ● ● ●
- Illustrator & Photoshop & Corel ● ● ● ● ●
- HTML & CSS ● ● ● ● ●

HOBBIES

- Photography - Poetry - Music
- Climbing - Hiking - Biking
- Acrobatics



ABOUT ME

Graduated in Geological Sciences in 2019 from University of Buenos Aires; I am also Technical in Physical Geography, it can be summarized in Topography and Cartography specialist, with work experience in both areas. I am a consultant (independent) and my professional interest is to apply my geological and geomorphological knowledge to study and analyze the environment in which we live and apply my Geographic Information Systems knowledge, Remote Sensing management and Python tools for useful developments.



DEGREES, STUDIES

Earth sciences PhD

Actual

"Changes in the NO Antarctic Peninsula geomorphology during the last 50 years". Buenos Aires University (**UBA**) – Instituto Antártico Argentino (**IAA**) – studentship by Consejo Nacional de Investigaciones Científicas y Técnicas (**CONICET**).

Geological Sciences Bachelor

2019

Department of Geology, Facultad de Ciencias Exactas y Naturales (FCEyN), Buenos Aires University (*Intendente Güiraldes 2160, Ciudad Autonoma de Buenos Aires, Argentina*).

Geographist-Mathematics Technician

2007

María Sanchez de Thompson Technical School (*Cabildo 40, Ciudad Autonoma de Buenos Aires, Argentina*).



PhD internships

Researcher internship

2024

"OUTLET GLACIER MONITORING IN THE LARSEN B EMBAYMENT, EASTERN ANTARCTIC PENINSULA", *Funds from Scientific Committee on Antarctic Research (SCAR)*. Workplace: Cooperative Institute for Research In Environmental Sciences (**CIRES**), Boulder Colorado University, **USA**.

Summary: Visual analysis and processing of radar and optical satellite images including DEMs from earthexplorer.usgs.gov/, <https://eos.com/landviewer>, worldview.earthdata.nasa.gov/, search.earthdata.nasa.gov/, cds.climate.copernicus.eu/, among other open data source data, using GIS software (QGIS, ArcGIS pro); Data

processing (big datasets, optical satellite images, meteorological rasters, LiDAR, ICESat, among others) with python; Numerical data processing and getting trends and statistics. Graphic outputs, Maps and Summaries.

Internship in Geoscience

2023

"CARTOGRAPHY AND REMOTE DATA MANAGEMENT". **World Wildlife Fund Pacific (WWF)**, Honiara, Solomon Islands. Project manager: Shannon Seeto, Manager WWF Solomon Islands.

Summary: Map and Web Maps production using ArcGIS online, QGIS, Leaflet, Felt, and Google Earth Engine.

Scholarship, PhD student

2021-Actual

"IMPACTS OF CLIMATE CHANGE IMPACT ON GLACIAL GEOMORPHOLOGY DURING THE LAST 50 YEARS IN THE NE AP", in **UBA & IAA & CONICET**; Argentina.

Summary: Visual analysis and processing of radar and optical satellite images including DEMs using GIS software (QGIS, ArcGis pro); Rasters processing and Elevation data processing in Python or pgAdmin-SQL; Numerical data processing (archive and recent meteorological data, archival and recent geomorphological data taken in 2022-2023-2024 field campaigns) using Python or R-Studio. Management and acquisition of GPS data and another field data. Getting trends and statistics with Excel, Power BI or Python; Graphic outputs, Maps and Theoretical synthesis.



JOB EXPERIENCE

GIS specialist

2020-2021

"GEOGRAPHICAL INFORMATION SYSTEMS", **Cambalache, Cooperativa Geográfica** (Ciudad Autónoma de Buenos Aires, Argentina).

Job summary: Geoservices projects; Management of Spatial data infrastructures and Open Data (IDERA, datos.gob.ar, Capas IGN, among others); Geographic database improvement; QGIS Teacher, Remote sensing Teacher, Geomarketer Teacher.

GIS specialist

2017-2020

"GEOMARKETING" in **UGI'S pizza** (*Nikioura srl. Cuit: 30-71344110-0, Argentina*).

Job summary: Geospatial market studies (GPS, surveys, QGIS, Google My Maps, ARGIS online).

Topography Consulting

2013-2017

"TOPOGRAPHY" with **Ing. Fernando Pellegatta**, *MN: 2376, Argentinian*. Civil engineering work:

Jorge Newbery Airport Parking, CABA, Argentina;

Hilton Hotel, Pilar, Buenos Aires, Argentina;

Tunnels Av. Libertador, CABA, Argentina.

Work summary: topographic survey and positioning of architectural elements using Total station & Optical level. Topographic mappings in autoCAD.

Technical Assistant

2014

"SOIL STUDIES". **Engineer Mariana Hermo**, *MN: 16580, Argentinian*.

Job summary: Field assistant, Database management, Drawings in AutoCAD.

Technical Assistant

2010-2013

"SOIL STUDIES". **Engineering Study "Ing. Civil Gustavo Margonari"**, *CUIT: 23-07774464-9, Argentinian*.

Job summary: Field assistant, Database management, Drawings in AutoCAD.

Technical

2009

"CARTOGRAPHY", in **Cartodata SA, current Genmap SA** (*Av. Alvarez Thomas 1625, Ciudad Autónoma de Buenos Aires, Argentina*).

Job summary: Triangulation, georeferencing images with field control points, mapping of aerial orthophotographs, CAD outputs.

Technical

2008

"HIGH PRECISION TOPOGRAPHY", in ***Nuclear Power Plants Atucha II (Adecco SA, Campana, Argentina)***.

Job summary: Positioning of machines, under 0.1mm precision, using high calibration theodolite and total station.

Internship

2007

"CARTOGRAPHY and GIS", in *Instituto Geográfico Nacional (IGN, Av. Cabildo 301, Ciudad Autónoma de Buenos Aires, Argentina)*.

Job summary: Realization and edition of maps with Spot and Aster satellite images for Argentine Republic, using ENVI, ERDAS and Adobe Photoshop. Improving and edition of Geographic Information Systems of Argentine Republic GIS datasets, using ArcGIS 3.4.



TRAINING

SQL & PostQGIS - Course

2024

"GEOSPATIAL DATABASE with SQL and postQGIS", Classes: 6. Cambalache Geográfica, Lavalle 1759, CABA, Argentina.

Web Maps - Courses

2023

"TOOLS FOR SHARING WEB MAPS", Class: 6. Cambalache Geográfica, Lavalle 1759. CABA, Argentina.

"WEB MAPS DEVELOPMENT", Class: 4. Cambalache Geográfica, Lavalle 1759. CABA, Argentina.

Python - Post-degree Course

2022

PROCESSING OF SATELLITE IMAGES AND VECTOR FILES WITH PYTHON", Gulich Institute, Universidad Nacional de Córdoba, Argentina. Duration: 12 weeks.

Python - Virtual Course

2022

"PYTHON 2023", Udemy. Total: 10 projects.

Training**2022**

"SEA ICE AND ICE OBSERVER", Ocean Teacher Global Academy , Ocean Expert , UNESCO. Duration: 1 week.

NASA Webinars**2021**

- "Follow-up of Vegetation Phenology through Remote Sensing";
- "The Monitoring of Groundwater Using NASA Mission Observations (GRACE)";
- "Satellite Remote Sensing for Agricultural Applications";
- "NASA satellites, sensors and ground system models used for water resource management";
- "Applications of remote sensing to soil moisture and evapotranspiration";
- "The creation and use of NDVI from satellite images", ARSET, NASA.

Web Design - Virtual Course**2020**

"FULL WEB DEVELOPMENT with html5, css3, js, Ajax php and MySQL", Udemy. Total: 350 of 700 class.

GIS - Post-degree Course**2020**

"DIGITAL ELEVATION MODELS (MDE): MORPHOLOGICAL ANALYSIS AND GIS", FFyL, Universidad de Buenos Aires, Argentina. Duration: 6 months.

GIS - Post-degree Course**2017**

"GIS GEOGRAPHICAL INFORMATION SYSTEMS AND REMOTE SENSING WITH QGIS SOFTWARE", IANIGLA, CCT Mendoza, CONICET. Duration: 30 hours.

Post-degree Course**2016**

"GLACIOLOGY OF THE SOUTH ANDES". Dr. Lucas Ruiz, IANIGLA, CCT Mendoza, CONICET, Conicet. Duration 60 hours.

Seminary**2016**

"ANTARCTIC GLACIAL AND PERIGLACIAL ENVIRONMENT". Dr. Adrián Silva Busso, FRCon, Universidad Técnica Nacional, Argentina.

Satellite Images - Post-degree Course

2016

"REMOTE SENSING". Daniel Perez , FCEyN , Universidad de Buenos Aires, Argentina. Duration: 1 Bimester.



SCIENTIFIC BACKGROUND

Environmental Monitoring

2022-2024

Integrand of project: PIDDEF 13/2020, RED DE MONITOREO DE DATOS MEDIOAMBIENTALES PARA SU USO EN EL ESTUDIO DE GLACIARES, CLIMA Y TAREAS DE APOYO LOGÍSTICO EN LA PENÍNSULA ANTÁRTICA. Director: Dr. Sebastián Marinsek. **Antarctic Summer Campaign:** Feb. 2023 and Feb 2024.

Oceanographic Campaign

2018

Integrand in scientific committee in the marine campaign: AU6 YTEC-GTGM 01. Ocean bottom studies, Malvinas Basin. Ship: ARA AUSTRAL. Director: *Dr. Alejandro A. Tassone*.

Participant in Documentary

2017

Participation in "MORENAS DE LA PATAGONIA", CONICET Documental. (<https://www.youtube.com/watch?v=vxMbrn0NVEc>).

Topographer

2013

Technical Colaborator in the project: UBACyT 2011-2014 Cod. 20020100100643. Campaign to Volcanic Field "La Payunia". Directora: *Dra. Orgeira, María Julia*.

Student Exhibitor

2012-2015

- 2nd Stage Internship 2015, Cultural Center "Tecnópolis", Argentina.
- Poster presentation as a student of the FCEyN, UBA "150 años de la FCEN", Argentina.
- Participation as a student of the FCEyN, UBA "Semana de las Ciencias, Argentina.
- Participation as a student of the FCEyN, UBA "Semana de las Ciencias", Argentina.



[Liliana S. Margonari; Naomi E. Ochwat, Ted A. Scambos and Sebastian Marinsek. "WIND PACKED SEA ICE AND MELANGE IN CRANE GLACIER FJORD CONTROLS GLACIER CALVING AND SPEED". **Poster AGU2024 conference**, American Geophysics Union, December 2024, Washington DC, USA.](#)

[Liliana S. Margonari; Carla Puigdomenech and Sebastian Marinsek "25 YEARS OF GLACIAL RETREAT ON VEGA ISLAND, NORTHEAST ANTARCTIC PENINSULA". **Poster SCAR2024 conference**, Scientific Committee on Antarctic Research, August 2024, Pucón, Chile.](#)

Margonari, Liliana; Lirio, Juan Manuel y Marinsek, Sebastián. "50 AÑOS DE RETROCESO GLACIAR EN LA ISLA JAMES ROSS, PENÍNSULA ANTÁRTICA". **Oral. XI Jornadas de las Ciencias de la Tierra**, Universidad Nacional de la Patagonia, Argentina. June 2024.

Margonari, Liliana; Lirio, Juan Manuel y Marinsek, Sebastián. "ANTARTIDA Y CAMBIO CLIMATICO. LARSEN B, RETRATO DEL CALENTAMIENTO". **Article in Journal** "Desde la Patagonia, Difundiendo saberes" - VOL. 20 - Nº 36 – 2023.

Margonari, Liliana y Marinsek, Sebastián "RETROCESO ACELERADO DE LOS GLACIARES DE LA ENSENADA LARSEN B DURANTE LOS AÑOS 2022 Y 2023", **Poster. CONAGUA 2023 Conference**, CCK, CABA, Argentina.

Margonari, Liliana and Marinsek, Sebastián, "RETROCESO ACELERADO DE LOS GLACIARES DE LA ENSENADA LARSEN A", **Oral. II Congreso Científico Provincial sobre Cambio Climático 2023**, Ushuaia, Tierra del Fuego, Argentina.

[Margonari, Liliana; Scambos, Ted; Ochwat, Naomi and Marinsek, Sebastián. "EFFECT OF WIND AND TEMPERATURE ON THE SEA ICE CONDITIONS IN THE EASTERN ANTARCTIC PENINSULA", **Poster. SOOS 2023 Symposium**, Hobart, Australia.](#)

Naomi E. Ochwat, Ted A. Scambos, Alison F. Banwell, Robert S. Anderson, Michelle L. Maclennan, Ghislain Picard, Julia A. Shates, Sebastian Marinsek, Liliana Margonari, Martin Truffer, and Erin C. Pettit, 2023. "TRIGGERS OF THE 2022 LARSEN B MULTI-YEAR LANDFAST SEA ICE BREAK-OUT AND INITIAL GLACIER RESPONSE". The Cryosphere, 2024.

Margonari, Liliana, Marinsek, Sebastian and Seco, Jose. "COMPARACIÓN DE BALANCE DE MASA GEODÉSICO Y GLACIOLÓGICO DEL GLACIAR BAHÍA DEL DIABLO, ISLA VEGA, PENÍNSULA ANTÁRTICA", **Oral. I Congreso Científico Provincial sobre Antártida**, 2023, Ushuaia, Tierra del Fuego, Argentina.

Margonari, Liliana and Marinsek, Sebastian. "RELATION BETWEEN CRANE GLACIER RETREAT AND SEA ICE COLLAPSE WITH HIGH POSITIVE DEGREES DAYS, EAST ANTARCTIC PENINSULA", Poster. SCAR 2022 Conference, online.

Margonari, Liliana. "GEOMORFOLOGÍA GLACIAR EN LOS VALLES ALERCE Y MANSO DEL MONTE TRONADOR, PROV. DE RÍO NEGRO, ARGENTINA." Collage Thesis, October 2019, FCEN, UBA.

Claudia Prezzi, Corina Risso, María Julia Orgeira, Francisco Nullo, Mario E. Sigismondi, Liliana Margonari. "SUBSURFACE ARCHITECTURE OF LAS BOMBAS VOLCANO CIRCULAR STRUCTURE (SOUTHERN MENDOZA, ARGENTINA) FROM GEOPHYSICAL STUDIES". Journal of South American Earth Sciences Volume 77, August 2017, Pages 247–260.

Risso C., Prezzi C., Orgeira M.J., Nullo F., Margonari L. and Nemeth K. "INVERSE STEPTOES IN LAS BOMBAS VOLCANO, AS EVIDENCE OF EXPLOSIVE VOLCANISM IN A SOLIDIFIED LAVA FLOW FIELD SOUTHERN MENDOZA ARGENTINE". Journal of South American Earth Sciences. Lugar: Amsterdam; Year: 2015 vol. 63 p. 360 – 374.

Prezzi, C. Risso C., Orgeira M.J., Nullo F., Margonari, L. and Németh K. 2013. "REVERSE STEPTOES IN LLANCANELO VOLCANIC FIELD,

MENDOZAARGENTINA: GEOLOGICAL AND GEOPHYSICAL EVIDENCES". Latinmag Letters, Volume 3, Special Issue (2013), OB11, 1-7. Proceedings Montevideo, October 2013, Uruguay.

Prezzi, C. Risso C., Orgeira M.J., Nullo F., Margonari, L. and Németh K. 2013. "REVERSE STEPTOES IN LLANCANELO VOLCANIC FIELD, MENDOZAARGENTINA: GEOLOGICAL AND GEOPHYSICAL EVIDENCES". Latinmag Letters, Volume 3, Special Issue (2013), OB11, 1-7. Proceedings Montevideo, October 2013, Uruguay.