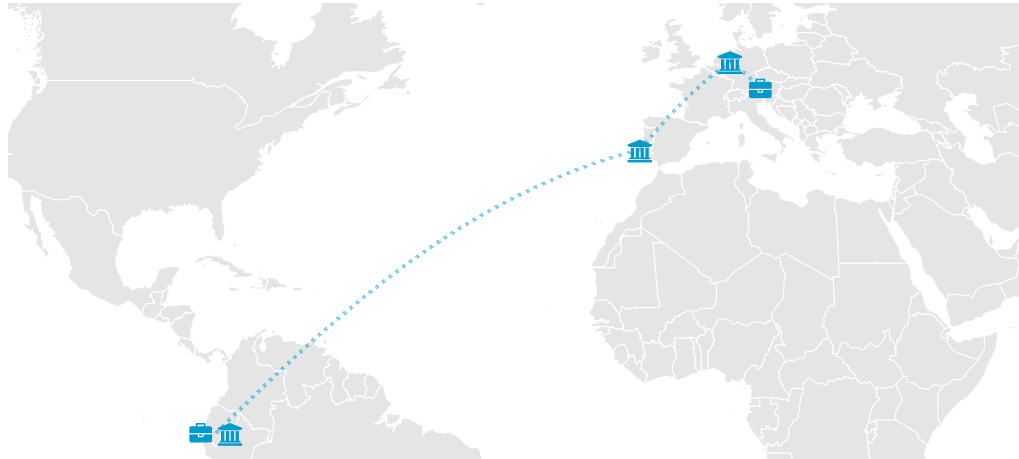# Lorena Abad

RESEARCHER | ENVIRONMENTAL ENGINEER | MSc. GEOSPATIAL TECHNOLOGIES

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✈ My journey

🧰 Professional Experience

Researcher - Department of Geoinformatics - Z_GIS
Salzburg, AT

UNIVERSITY OF SALZBURG
04, 2019 - Present

• Researcher for the MORPH, RiCoLa, STEC, citizenMORPH, MontEO projects in the Landslide division of the OBIA group.

Research Assistant - Grupo de Investigación de Ciudades Sustentables Llactalab - Departamento Interdisciplinario de Espacio y Población
Cuenca, EC

UNIVERSIDAD DE CUENCA
05, 2017 - 08, 2017

• Spatio-temporal data analyst for the project: "Study of Cyclists and Pedestrian Mobility Patterns in Cuenca for a Sustainable Mobility".

Technical Assistant - Carrera de Ingeniería Ambiental - Facultad de Ciencias Químicas
Cuenca, EC

UNIVERSIDAD DE CUENCA
09, 2016 - 08, 2017

• CEDIA project "Geo-statistical Inference of Meteorological Data for Azuay and Chimborazo provinces".

Researcher - Carrera de Ingeniería Ambiental - Facultad de Ciencias Químicas
Cuenca, EC

UNIVERSIDAD DE CUENCA
10, 2016 - 01, 2017

• Project "Water Quality and Environmental Variables Monitoring in Artificial Habitats for Endangered Species in Cuenca".

Research Assistant - Carrera de Ingeniería Ambiental - Facultad de ciencias Químicas
Cuenca, EC

UNIVERSIDAD DE CUENCA
03, 2016 - 07, 2016

• Project "Determination of Particulate Matter PM10, PM2.5, and noise in Cuenca canton".

Teaching Assistant - Carrera de Ingeniería Ambiental - Facultad de Ciencias Químicas
Cuenca, EC

UNIVERSIDAD DE CUENCA
03, 2012 - 07, 2015

• Introduction to Physics and Remote Sensing courses for the Environmental Engineering Career from Universidad de Cuenca.

Intership - Grupo de Investigación de Ciudades Sustentables Llactalab - Departamento Interdisciplinario de Espacio y Población
Cuenca, EC

UNIVERSIDAD DE CUENCA
05, 2015 - 06, 2015

• Cartographic data gathering organization, topographic correction and categorization of urban land uses, scientific papers analysis for bibliographic review.

Intership - Departamento de Recursos Hídricos y Ciencias Ambientales (iDRHICA)
Cuenca, EC

UNIVERSIDAD DE CUENCA
07, 2014 - 09, 2014

• Assess the functioning state of Davis Station sensors, identify similarities and differences of two river basins hydrograms, analyze the effects of temperature and relative humidity on reference evapotranspiration calculation.

📄 Selected Publications

Mapping and monitoring of landslide-dammed lakes using Sentinel-2 time series -a case study after the 2016 Kaikoura Earthquake in New Zealand
Conference Proceedings

EGU GENERAL ASSEMBLY 2020   *03, 2020*

- **Abad, L.**, Hölbling, D., Spiekermann, R., Dabiri, Z., Prasicek, G., Argentin, A.-L. (2020). Mapping and monitoring of landslide-dammed lakes using Sentinel-2 time series -a case study after the 2016 Kaikoura Earthquake in New Zealand. EGU General Assembly 2020. https://doi.org/10.5194/egusphere-egu2020-572

Observation and Reporting of Landforms and Landscape Dynamics by Citizens
Conference Proceedings

EGU GENERAL ASSEMBLY 2020   *03, 2020*

- Hölbling, D., Hennig, S., **Abad, L.**, Ecke, S., Tiede, D. (2020). Observation and Reporting of Landforms and Landscape Dynamics by Citizens. EGU General Assembly 2020. https://doi.org/10.5194/egusphere-egu2020-13593

Technological solutions for contributory citizen science: experiences from citizenMorph
Journal Article

PROCEEDINGS OF SCIENCE   *06, 2019*

- Hennig, S., **Abad, L.**, Hölbling, D. (2019). Technological solutions for contributory citizen science: experiences from citizenMorph. Proceedings of Science, June 2019, 26–28. https://pos.sissa.it/366/005/pdf

Mapping and Analyzing the Evolution of the Butangbunasi Landslide Using Landsat Time Series with Respect to Heavy Rainfall Events during Typhoons
Journal Article

APPLIED SCIENCES, MDPI   *01, 2020*

- Hölbling, D., **Abad, L.**, Dabiri, Z., Prasicek, G., Tsai, T.-T., Argentin, A.-L. Mapping and Analyzing the Evolution of the Butangbunasi Landslide Using Landsat Time Series with Respect to Heavy Rainfall Events during Typhoons. Appl. Sci. 2020, 10, 630. https://doi.org/10.3390/app10020630

An Object-Based Approach for Monitoring the Evolution of Landslide-dammed Lakes and Detecting Triggering Landslides in Taiwan
Journal Article

ISPRS - INTERNATIONAL ARCHIVES OF THE PHOTOGRAMMETRY, REMOTE SENSING AND SPATIAL INFORMATION SCIENCES   *09, 2019*

- Dabiri, Z., Hölbling, D., **Abad, L.**, Prasicek, G., Argentin, A.-L., Tsai, T.-T. (2019). An Object-Based Approach for Monitoring the Evolution of Landslide-dammed Lakes and Detecting Triggering Landslides in Taiwan. ISPRS - International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, XLII-3/W8, 103–108. https://doi.org/10.5194/isprs-archives-XLII-3-W8-103-2019

Assessment of Landslide-Induced Morphology Changes using an Object-Based Image Analysis Approach: A Case Study of Hitardalur, Iceland
Journal Article

ISPRS - INTERNATIONAL ARCHIVES OF THE PHOTOGRAMMETRY, REMOTE SENSING AND SPATIAL INFORMATION SCIENCES   *09, 2019*

- Dabiri, Z., Hölbling, D., **Abad, L.**, Tiede, D. (2019). Assessment of Landslide-Induced Morphology Changes using an Object-Based Image Analysis Approach: A Case Study of Hitardalur, Iceland. ISPRS - International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, XLII-3/W8, 109–114. https://doi.org/10.5194/isprs-archives-XLII-3-W8-109-2019

Quantifying Bicycle Network Connectivity in Lisbon Using Open Data
Journal Article

INFORMATION, MDPI   *11, 2018*

- **Abad, L**., van der Meer, L. (2018). Quantifying Bicycle Network Connectivity in Lisbon Using Open Data. Information, 9(11), 14. https://doi.org/10.3390/info9110287

Exploratory analysis of volunteer cyclists behavior through spatio-temporal patterns mining in Cuenca, Ecuador
Journal Article

MASKANA   *06, 2018*

- Abad, L., Orellana, D. (2018). Análisis exploratorio de comportamientos de ciclistas voluntarios mediante minería de patrones espacio-temporales en Cuenca, Ecuador. Maskana, 9(1), 141-151.

🏛 Education

Westfälische Wilhelms-Universität Münster
Münster, DE

ERASMUS MUNDUS MSC. GEOSPATIAL TECHNOLOGIES   *2018 - 2019*

- S2 2018: covering Cartography, Reference Systems, Spatial Data Science with R, Unmanned Aerial Systems
- S3 2018: Masters Thesis: Validating a bike network analysis score based on open data as a connectivity measure of urban cycling infrastructure adapted for European cities. Supervised by Prof. Dr. Edzer Pebesma. URL: http://hdl.handle.net/10362/67511

Universidade Nova de Lisboa
Lisbon, PT

ERASMUS MUNDUS MSC. GEOSPATIAL TECHNOLOGIES   *2017 - 2019*

- S1, 2017: covering Geospatial Data Mining, Geostatistics, Remote Sensing, Geographic Information Science, Python programming.
- More info: mastergeotech.info

Universidad de Cuenca
Cuenca, EC

ENVIRONMENTAL ENGINEER BSC.   *2011 - 2016*

- Covering Cartography, Remote Sensing, Ecology, Hydrology, Meteorology and Climatology, Environmental Studies, Natural Resources Management, among 66 subjects during 10 semesters.
- Bachelor Thesis (SPA): Particulate Matter less than 10 microns concentration estimation through Remote Sensing in the Urban Area of Cuenca city. Supervised by Danilo Mejía Coronel. URL: http://dspace.ucuenca.edu.ec/handle/123456789/25484
- More info: ucuenca.edu.ec

Personal Skills

LANGUAGES

Skill	Spanish	English	French	Portuguese	German	Dutch
Reading	Native	C2	B2	B1	A2	A1
Writing	Native	C1	B2	B1	A1	A1
Listening	Native	C2	B2	B1	A2	A1
Speaking	Native	C2	B2	B1	A2	A1

Common European Framework of Reference for Languages: A1/A2: Basic User. B1/B2: Independent User. C1/C2: Proficient User

Distinctions

2018	Benigno Malo Prize - University Honors Award	*Universidad de Cuenca*
2018	AGILE 2018 conference - travel grant	*AGILE & ESRI*
2017	Erasmus Mundus Scholarship	*European Commission*
2015	Best Scientific Poster - 2nd International Summer School "The Biodiversity of Genes, Species and Ecosystems"	*Universität Osnabrück*
2014 - 2016	Vanguardia Honors Program	*Universidad de Cuenca*