

# Lorena Abad

#### RESEARCHER | ENVIRONMENTAL ENGINEER | MSc. GEOSPATIAL TECHNOLOGIES

Schillerstraße 30, 5020 Salzburg, Austria Nationality: Ecuadorian, Birthdate: 05/01/1994

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### **Professional Experience**

University of Salzburg

• 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

Universidad de Cuenca

· 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

UNIVERSIDAD DE CUENCA

UNIVERSIDAD DE COLNCA

 $\bullet \quad \text{CEDIA project "Geo-statistical Inference of Meteorological Data for Azuay and Chimborazo provinces"}.$ 

Researcher - Carrera de Ingeniería Ambiental - Facultad de Ciencias Químicas
UNIVERSIDAD DE CUENCA

• 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

Universidad de Cuenca

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

Teaching Assistant - Carrera de Ingeniería Ambiental - Facultad de Ciencias Químicas

· 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

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

Salzburg, AT

Cuenca, EC

Cuenca, EC

Cuenca, EC

Cuenca, EC

*Cuenca, EC* 03, 2012 - 07, 2015

Cuenca, EC

04, 2019 - Present

05, 2017 - 08, 2017

09, 2016 - 08, 2017

10, 2016 - 01, 2017

03, 2016 - 07, 2016

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.

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## 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

• 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

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

Journal Article

03. 2020

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. Applied Sciences. 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

#### 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, (ACSC2019)005, 26–28. https://pos.sissa.it/366/005/pdf

#### **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

Мускуиу

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.

### **<b>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



#### A 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

### **Ö** 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	Universität Osnabrück
	"The Biodiversity of Genes, Species and Ecosystems"	Universität Oshabiack
2014 - 2016	Vanguardia Honors Program	Universidad de Cuenca