

# Lorena Abad

#### RESEARCHING THE ENVIRONMENT THROUGH GEOSPATIAL TECHNOLOGIES

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### Professional Experience \_

#### Researcher - Department of Geoinformatics - Z\_GIS

Salzburg, AT

University of Salzburg

04, 2019 - Present

 Using remote sensing and GIS to study natural geohazards and their interrelations for the MontEO, STEC, RiCoLa projects in the Landslide division of the Risk, Hazard & Climate research 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".

### **1** Education\_

#### Universidade Nova de Lisboa & Westfälische Wilhelms-Universität Münster

Lisbon, PT & Münster, DE

ERASMUS MUNDUS MSC. GEOSPATIAL TECHNOLOGIES

2017 - 2019

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

#### **Universidad de Cuenca**

Cuenca, EC

ENVIRONMENTAL ENGINEER BSc.

2011 - 2016

• Bachelor Thesis (in spanish): 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

For a complete list of publications see my Google Scholar profile.

## Assessment of Landslide-Induced Geomorphological Changes in Hítardalur Valley, Iceland, Using Sentinel-1 and Sentinel-2 Data

Journal Article

APPLIED SCIENCES

Dabiri, Z., Hölbling, D., Abad, L., Helgason, J. K., Sæmundsson, Þ., Tiede, D. (2020). Assessment of Landslide-Induced Geomorphological Changes in Hítardalur Valley, Iceland, Using Sentinel-1 and Sentinel-2 Data. Applied Sciences, 10(17), 5848. https://doi.org/10.3390/app10175848

#### Implementing Geo Citizen Science Solutions: Experiences from the citizenMorph Project

Journal Article

JOURNAL FOR GEOGRAPHIC INFORMATION SCIENCE

06, 2020

08 2020

• Hennig, S., **Abad, L.**, Hölbling, D., Tiede, D. (2020). Implementing Geo Citizen Science Solutions: Experiences from the citizenMorph Project. Journal for Geographic Information Science, 7(2), 3–14. https://doi.org/10.1553/giscience2020

### 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-equ2020-572

#### 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. Applied Sciences. 2020, 10, 630. https://doi.org/10.3390/app10020630

#### **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

## Particulate Matter less than 10 microns concentration estimation through Remote Sensing in the Urban Area of Cuenca city

Conference Proceedings

XVI CONFERENCIA DE SISTEMAS DE INFORMACIÓN GEOGRÁFICA

09, 2017

• Abad, L., Mejía-Coronel, D. (2017). Estimación De La Concentración De Material Particulado Menor a 10 Micras a Través De Sensores Remotos En El Área Urbana De La Ciudad De Cuenca. In XVI Conferencia de Sistemas de Información Geográfica (pp. 381-390). Cuenca, Ecuador. Universidad del Azuay.



### TECHNICAL SKILLS

Coding Languages	Software	Other

R – SQL – Python – JavaScript QGIS – ArcGIS – SAGA – eCognition – Git

PostgreSQL – PostGIS – RStudio –

Earth Engine – GIMP – Mendeley

Git – Markdown – LaTex – OpenStreetMap

#### ORGANIZATIONAL SKILLS

06, 2020	e-Rum 2020 satellite event: <i>sfnetworks</i> Webinar and Hackathon 🔗	Online Event
09, 2019	citizenMorph App Testing Workshop	Höfn, IS
12, 2018	GeoMundus 2018 <i></i> <b>𝚱</b>	Lisbon, PT
06, 2016	I University Simposium of Environmental Science Research	Cuenca, EC
2013 - 2014	Vicepresident of the Student Association of Environmental Engineers	Cuenca, EC

#### A Z LANGUAGES

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

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