



Lorena Abad

MSC. GEOSPATIAL TECHNOLOGIES SECOND YEAR STUDENT

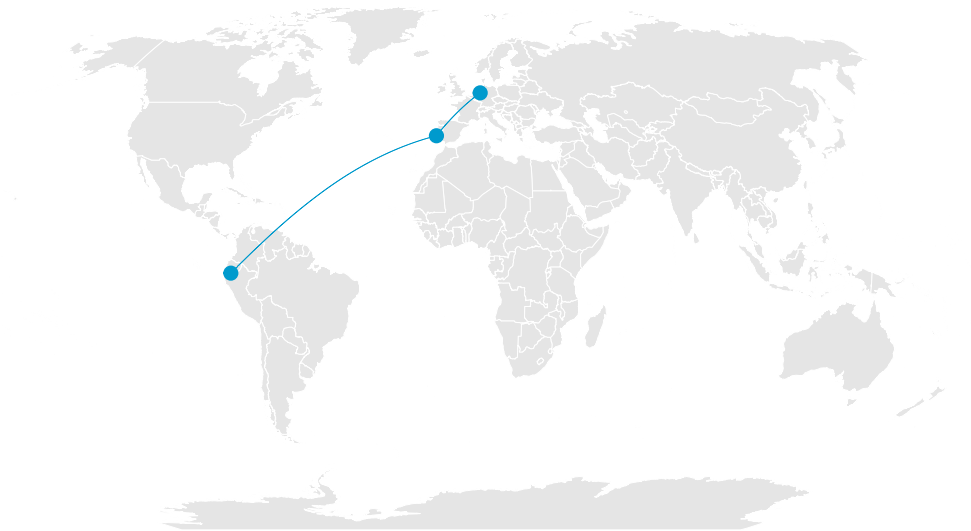
Lilienthalweg 27, 48167, Münster, Nordrhein Westfalen, Germany

+351 939 061 939 | lore.abad6@gmail.com | [loreabad6](#) | [lorena-abad](#) | [loreabad6](#)

Professional summary

I am an environmental engineer from Cuenca, Ecuador finishing my studies for an Erasmus Mundus Master of Science in Geospatial Technologies, expected by March 2019. My research scope includes spatial data analysis, particularly focused on R programming; remote sensing and earth observation data analysis, specially optical satellite imagery applied to environmental studies and analyses such as air pollution, land use/land cover change; geostatistical analysis of climate data; and ecological modelling. I am currently interested in sustainable mobility, especially bicycle commuting. I feel very keen to pursue a career in research, science, and academia.

Education



Westfälische Wilhelms-Universität Münster

Münster, Germany

ERASMUS MUNDUS MSC. GEOSPATIAL TECHNOLOGIES

2018 - Present

- S2 2018: Advanced GIS Methods in Digital Cartography
- S2 2018: Advanced Research Methods and Skills
- S2 2018: Geospatial Technologies: Transferring Data to Knowledge
- S2 2018: Reference Systems for Geographic Information
- S2 2018: Spatial Data Science with R
- S2 2018: Unmanned Aerial Systems
- S2 2018: Project Management
- 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.
- More info: mastergeotech.info

Universidade Nova de Lisboa

Lisbon, Portugal

ERASMUS MUNDUS MSC. GEOSPATIAL TECHNOLOGIES

2017 - Present

- S1 2017: Geospatial Data Mining
- S1 2017: Geostatistics
- S1 2017: Remote Sensing
- S1 2017: Geographic Information Science
- S1 2017: Group Project Seminar (covering Python and PostGIS)
- More info: mastergeotech.info

Universidad de Cuenca

Cuenca, Ecuador

ENVIRONMENTAL ENGINEER BSc.

2011 - 2016

- S6 2014: Cartography and GIS
- S6 2014: Hydrology and Watershed Management
- S7 2014: Remote Sensing
- S7 2014: Geology and Geological Hazards
- S6 2014: Soil Science and Management
- S9 2015: Territorial Planning
- S9 2015: Meteorology and Climatology
- S9 2015: Environmental Studies
- S10 2016: Natural Resources Management
- Among others (the curriculum includes 66 subjects)
- Thesis: Particulate Matter less than 10 microns concentration estimation through Remote Sensing in the Urban Area of Cuenca city.
- More info: ucuenca.edu.ec

Professional Experience

Universidad de Cuenca

Cuenca, EC

RESEARCH ASSISTANT - GRUPO DE INVESTIGACIÓN DE CIUDADES SUSTENTABLES LLACTALAB - DEPARTAMENTO

05, 2017 - 08, 2017

INTERDISCIPLINARIO DE ESPACIO Y POBLACIÓN

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

Universidad de Cuenca

Cuenca, EC

TECHNICAL ASSISTANT - CARRERA DE INGENIERÍA AMBIENTAL - FACULTAD DE CIENCIAS QUÍMICAS

09, 2016 - 08, 2017

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

Universidad de Cuenca

Cuenca, EC

RESEARCHER - CARRERA DE INGENIERÍA AMBIENTAL - FACULTAD DE CIENCIAS QUÍMICAS

10, 2016 - 01, 2017

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

Universidad de Cuenca

Cuenca, EC

RESEARCH ASSISTANT - CARRERA DE INGENIERÍA AMBIENTAL - FACULTAD DE CIENCIAS QUÍMICAS

03, 2016 - 07, 2016

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

Universidad de Cuenca

Cuenca, EC

TEACHING ASSISTANT - CARRERA DE INGENIERÍA AMBIENTAL - FACULTAD DE CIENCIAS QUÍMICAS

03, 2012 - 07, 2015

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

Publications

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.

Potential distribution of the Polylepis genus in the Paute river basin under a climate change scenario

Journal Article

REVISTA DE LA FACULTAD DE CIENCIAS QUÍMICAS

12, 2018

- Mejía-Coronel, D., Tonón, M., & Abad, L. (2018). Distribución Potencial del Género Polylepis en la Cuenca del Río Paute bajo un Escenario de Cambio Climático. Revista de La Facultad de Ciencias Químicas., December(19), 21-37. <https://doi.org/10.1017/CBO9781107415324.004>

Water quality and environmental variables in endangered amphibia habitats in Cuenca urban area

Journal Article

REVISTA DE LA FACULTAD DE CIENCIAS QUÍMICAS

11, 2017

- Abad, L., Mejía, D., León, P., Cárdenas, I., Pacheco, B., & Tonón, M. (2017). Calidad del Agua y Variables Ambientales en Hábitats para Anfibios Amenazados en la Zona Urbana de Cuenca. Revista de La Facultad de Ciencias Químicas. Universidad de Cuenca.

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.

Distinctions

Benigno Malo Prize

UNIVERSIDAD DE CUENCA

2018

- University Honors Award

Erasmus Mundus Scholarship

EUROPEAN COMMISSION: EDUCATION, AUDIOVISUAL AND CULTURE EXECUTIVE AGENCY

2017

- Graduate Studies Scholarship

Vanguardia Honors Program

UNIVERSIDAD DE CUENCA

2014 - 2016

- Extra-curricular classes for honor students

Personal Skills

SOFTWARE AND CODING LANGUAGES

R, SQL, PYTHON, LATEX, MARKDOWN

Coding Languages

RSTUDIO, POSTGRESQL, POSTGIS, QGIS, ARCGIS, ENVI, WEKA, GIMP

Software

LANGUAGES

SPANISH

- Native

ENGLISH

- Written comprehension: C2
- Written expression: C1
- Oral comprehension: C2
- Oral expression: C2

FRENCH

- Written comprehension: B2
- Written expression: B2
- Oral comprehension: B2
- Oral expression: B2

GERMAN

- Written comprehension: A2
- Written expression: A1
- Oral comprehension: A2
- Oral expression: A2

PORTUGUESE

- Written comprehension: B1
- Written expression: B1
- Oral comprehension: B1
- Oral expression: B1

COMMON EUROPEAN FRAMEWORK OF REFERENCE FOR LANGUAGES

- A1/A2: Basic User. B1/B2: Independent User. C1/C2: Proficient User

References

Prof. Dr. Edzer Pebesma

EDZER.PEBESMA@UNI-MUENSTER.DE

Münster, Germany

Prof. Dr. Marco Painho

PAINHO@NOVAIMS.UNL.PT

Lisbon, Portugal

Daniel Orellana, PhD.

DANIEL.ORELLANA@UCUENCA.EDU.EC

Cuenca, Ecuador

Annex

Transcript of Records of Erasmus Mundus MSc. Geospatial Technologies Second Semester as proof of progress.