
Diana María Contreras Mojica

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I am Lecturer in Geospatial Science at the School of Earth and Environmental Sciences at Cardiff University in the United Kingdom (UK). I have experience in the academic sector in the UK, Chile, Austria, and the Netherlands, the private sector in Italy, and the public sector in Colombia. In the academic sector, I have had the opportunity to teach, do research, support PhD candidates and supervise and co-supervise Master's and Bachelor's students. In the private sector, I contributed to projects as head of a section, and in the public sector, I assisted project managers and professors. I maintain active interests in the spatial component of disaster management, vulnerability and resilience, health inequality and social justice, climate change adaptation, business continuity, natural language processing, urban planning, food insecurity, migration, humanitarian actions, human rights advocacy, equality, diversity and inclusion (EDI), and environmental activities.

EMPLOYMENT

July 2021 – Ongoing **Cardiff University**
Lecturer in Geospatial sciences
Cardiff, United Kingdom (UK)

I lead the module Geographic Information System (GIS), maps and analytical skills. This is a one-year module divided into the autumn and spring semesters. The autumn semester addresses the topic of GIS, while the second semester covers geosciences, introduction to remote sensing (RS), nautical charts and statistics. I teach GIS in the autumn semester (20 credits) for year one (Y1) between 190 and 238 students registered in the undergraduate programmes: environmental geosciences, exploration geology, geology, environmental, marine and physical geography, and environmental sustainability sciences. I contribute to the Master in Environmental Hazards on the topics of exposure and physical and social vulnerability and risk management since 2023. Between 2023 and 2024, I contributed to the undergraduate module Hazard, Risk and Resilience, teaching the topics of communicating hazard and risk and tools and technologies to support hazard and risk mapping. In 2024, I contributed to the module EA2317 Geographical Perspectives on Environment and Society module for Y2 students, teaching about the interaction of environmental sciences and geography with social sciences. I am also an advisor on GIS analysis for the dissertations of bachelor students taking the same courses. I tutor undergraduate students in years 1, 2, and 3. I support organising and implementing fieldwork in Geography and Geosciences for Y1 and Y2 students. I supervise Bachelor dissertations and Master theses. I have been a member of the EDI Committee of the School of Earth and Environmental Sciences since 2022 and the Chair of the Ethics Committee in Research of the School from 2024.

February 2019 – **Newcastle University**
July 2021 Research Associate (RA)
Newcastle upon Tyne, UK

I worked on the project: 'Learning from Earthquakes: Building Resilient Communities through Earthquake Reconnaissance, Response, and Recovery'. This project aimed to improve the understanding of earthquake impacts, response, and recovery through targeted data gathering in earthquake reconnaissance missions and, through associated research, to collect better, interpret, exploit and disseminate this data. My main duties were:

- Sentiment analysis (SA) applied to post-disaster recovery assessment.
- Development of training material for earthquake reconnaissance missions.
- Data collection, process, and management.
- Project website content manager: Learning from Earthquakes: <https://research.ncl.ac.uk/learningfromearthquakes/>
- Project community manager:
 - Twitter account: <https://twitter.com/LEarthquakes>
 - Facebook: <https://www.facebook.com/Learning-from-Earthquakes-110392457215986/?>
 - Instagram: https://www.instagram.com/learning_from_earthquakes_uk/
 - Youtube: <https://www.youtube.com/channel/UCQf--IBG9fWqNHWimrcXE1w/>
- Publish peer-reviewed papers.
- Revision of technical reports.
- Project management assistance.
- Co-supervision of Bachelor students.
- Occasional support for projects related to climate change in Latin America (Colombia and Peru).
- Additional information: <https://research.ncl.ac.uk/learningfromearthquakes/>

June 2018 - **Research Centre for Integrated Disaster Risk Management (CIGIDEN)**
February 2019 Post-doctoral Researcher
Santiago, Chile

I worked on the project: 'Social vulnerability to natural hazards and dependence to critical urban infrastructure: a spatial model for the healthcare system in Santiago, Chile'. My main duties were:

- Integration of socio-economic assessment into mitigation strategies and resilience.
- Integration of research into a risk and resilience analysis platform.
- Organisation of workshops:
 - Understanding socio-economic impacts of disasters and their effects in critical infrastructure resilience. Speaker: Prof. Ilan Noy.
 - 'Learning about post-disaster phases by playing board games'. Moderator: Dr. Diana Contreras. Additional information:
<https://www.youtube.com/watch?v=m0zV0hEMi9g>
<https://www.youtube.com/watch?v=N9lQrKqUhsK>
<https://www.youtube.com/watch?v=tHNpH-IBJYs>
<https://www.youtube.com/watch?v=HcO5PiKYE2w&t=11s>

July 2018 - **Caritas Switzerland**
November 2018 External Consultant
La Guajira, Colombia

I was in charge of the preparation of a case study for the Swiss NGO Disaster Risk Reduction (DRR) platform. The project aimed to portray rural inhabitants affected by climate change in vulnerable communities in La Guajira (Colombia) and illustrate the local realities in a context of climate change, resource degradation and food insecurity. The impacts of the Cerrejón coal mine and the El Cercado dam were part of the documentation. My main duties were:

- Assessment of situation drivers, needs, partners and resulting opportunities for Caritas Switzerland to engage in la Guajira from 2019 onwards in the context of climate change adaptation (CCA), food (in)security, water resource management and DRR.
- Additional information:
<https://www.youtube.com/watch?v=wP3u8ht8gl4&feature=youtu.be&a=>

**October 2016 -
May 2018**

Global Earthquake Model (GEM) Foundation
Social Vulnerability and Resilience (SVR) Team Leader
Pavia, Italy

My main duties were:

- Measuring social concepts - social vulnerability (SV), resilience, social capacity and recovery.
- Developing methods to model interdependencies between damage, losses, and socioeconomic characteristics of populations.
- Improving GEM's social vulnerability and integrated risk (SVIR) initiative through the development of applied research and tools that account for issues such as cascading effects and indirect economic loss.
- Participating in an interdisciplinary team of scientist and engineers to develop and implement models and tools for integrated risk assessment.
- Supervising the development of the Global Model of Social Vulnerability.
- Supervising the development of the models of SV for the countries involved in the Assessing and Mitigating Earthquake Risk in the Caribbean and Central America (CCARA) project. Additional information:
<https://www.youtube.com/watch?v=aaPqXOdWbCw>
- Undertaking Resilience Performance Scorecard (RPS) workshops. The RPS is a multi-level and multi-scale self-evaluation tool that empowers stakeholders to assess earthquake risk and resilience parameters based on qualitatively derived information using innovative data collection technologies.
<https://www.youtube.com/watch?v=wg-2cZP5DCs&t=4s>
- Supervising the preparation of reports in the framework of projects.
- Reporting to the Governing Board of GEM foundation the progress of the SVR team in the projects where the area is involved.
- Coordinating and collaborating with the hazard and physical risk team in formulating proposals, working on projects, developing deliverables and presenting results.
- Disseminating work through scholarly publications, reports presentations, and workshop participation.
- Contributing to GEM communications and outreach that may include web pages, presentations and brochures.
- Mentoring junior scientists and students.

April 2012 - October 2020

UNIGIS Latin America
University of Salzburg (Austria) and
Universidad San Francisco de Quito (Ecuador).
Deputy/Interim Master Thesis Coordinator,
Master Thesis Supervisor and on-line Lecturer

Salzburg, Austria

My main duties were:

- Writing the lessons for the elective on-line module: 'GIS, risk and disasters' at UNIGIS Latin America (an on-line Master's program in GIS run jointly by the University of Salzburg and la Universidad San Francisco de Quito - Ecuador).
- Designing, updating, and uploading content, tests and assignments for the students. The elective module took three months (twice per year). During these three months, I welcomed the students and invited them to introduce themselves to the other students in our virtual forum. Every week, I sent them a message to indicate which lessons they must complete that week and also remind them that I was available to answer any queries or questions. In the end, I received the assignments, and I allocated a mark to each one, taking into account not only the final result of the exercises but also the performance during the module based on participation in the virtual forum. Between 2012 and 2016, 107 students of the programme attended my on-line course.
- Advising research of MSc students who wrote their thesis on the topics of hazard zonation, vulnerability and risk assessment, climate change and risk due to natural phenomena, preparedness, emergency response and security. In this case, I was in charge of checking student Master thesis proposals, in which they described the problem that they want to solve, the importance of solving this problem, their methods, the references used to write the plan and the schedule to carry out the master thesis. After the approval, students had to present two reports before the final version to get the approval for their Master thesis. 15 students graduated from their Master Studies with their thesis under my supervision.
- I replaced the Master thesis coordinator during her maternity leave, and I continued as her deputy until November 2016. My duties were to check the Master theses approved by supervisors. Theses approved were forwarded to the Academic Committee of the University of Salzburg, and others returned to supervisors to coordinate their further improvement.

March 2009 - University of Salzburg
December 2011 Interfaculty Department of Geoinformatics Z_GIS
Researcher assistant - MOVE project
Salzburg, Austria

My main duties were:

- Preparing metadata form for single and composite indicators and sent them to the project partners.
 - Preparing the literature review regarding the concepts of vulnerability and resilience, sensitivity and uncertainty, and scaling.
 - Contributing to publications related to the project.
 - Writing publications within the framework of the MOVE project.
 - Designing the architecture of the MOVE indicators database visualiser.
 - Contributing to dissemination activities in social and professional networks, as well as at conferences.
 - Supporting the organisation of workshops.
 - Developing my research plan for the Doctoral thesis entitled: 'Spatial indicators of recovery after earthquakes: The case of L'Aquila-Italy'.
 - Assisting in the everyday management of the research project (logistic issues).
 - Attending project meetings.
 - Additional information: <https://cordis.europa.eu/project/id/211590/reporting>
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May 2001 - Institute of Risk Management and Climate Change (IDIGER)
September 2007 Project manager assistant of preparedness, emergency response and disaster prevention
Bogotá DC, Colombia

My main duties were:

- Supporting the project: 'Study of emergency and disaster preparedness in the metropolitan area of Bogotá DC' This project was undertaken jointly with the Japanese International Cooperation Agency (JICA). My support included contacting stakeholders, the organisation of the meetings and to plan and implement workshops, to check and edit the reports related to the outputs of the project and to disseminate them (2001).
- Participation in the in the formulation of the earthquake emergency response plan in Bogota DC, Colombia (2002-2005)
- Formulating a methodological strategy for the organisation of building inspection groups after an earthquake in the city. The proposed methodology was implemented and resulted in more than 400 architects, engineers, and students being trained (2002).
- Supporting the water supply, electricity and communication companies, and infrastructure institution in Bogota DC (Colombia) to develop the emergency response and business continuity plans (2002).
- Participation in the formulation of emergency protocols in Bogotá DC (Colombia), including the first responder, search and rescue (SAR), SAR with dogs, HAZMAT, bees management, forest fires, and building fires (2003).
- Monitoring the implementation of projects related to preparedness and emergency response (2003_2005).
- Carrying out Damage Assessment and Needs Analysis (DANA) of families affected by floods and landslides. I was also part of the team on the field in charge of allocating and deliver the proper humanitarian aid for each family according to the DANA's (2005).
- Supporting logistics of shelters regarding the allocation of emergency kits for cooking, cleaning and sleeping.
- I was the representative of IDIGER in the command posts in the planning section under the Incident Command System (ICS) scheme to supervise the situation unit. To a less degree, I was allocated to respond to man-made emergencies such as terrorist attacks and mass events in the situation unit (2003-2005).
- Writing the chapter of emergency facilities in the Urban Master Plan of Security, Defence and Justice for Bogota DC, Colombia (2004).
- Introduction of the component of risk management into the urban planning, landscape design and the construction practice in Bogotá DC, in the framework of the Disaster Prevention Plan of Bogota DC (2006 - 2007).

September 1997 - Universidad Nacional de Colombia – Sede Bogotá D.C.
December 2000 Teaching Assistant
Bogota DC, Colombia

My main duties were:

- Requisition and organise all of the logistic resources (attendance lists, equipment, teaching materials and attendance certifications) required for the efficient conduct of academic courses and technical seminars for post-graduate students. Courses: 'On-site construction', 'Land use planning for Bogotá D.C.', 'Accessibility (with safety) to the physical environment for physically challenged people', and 'Pathology of buildings'.
 - Supporting the coordination of maintenance of the buildings belonging to the Faculty of Arts in the university.
 - Describing the process and control management of the documents produced by the offices in the university following national regulations.
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EDUCATION AND QUALIFICATIONS

October 2009 – Doctor (PhD) in Natural Sciences – Applied Geoinformatics
October 2015 University of Salzburg, Salzburg, Austria
Interfaculty Department of Geoinformatics - Z_GIS

Dissertation: 'Spatial Indicators of Recovery after earthquakes. The case of L'Aquila, Italy'. Several indices have been developed to measure vulnerability, but very few have been elaborated on the topic of recovery indices, and even fewer based on spatial indicators. The objective of this PhD research was to develop a methodology for monitoring and evaluating the recovery process of an area after an earthquake, beyond the physical aspect, based on spatial indicators. Fourteen categories of building conditions were identified: new buildings, construction on-going, partially enabled, reconstructed, reconstruction on-going, earthworks, reconstruction projected, repaired, debris removed, propped, inhabited, damaged, restricted use and demolished. Thirteen categories of building use were recognised: residential, commercial, transport, amenity, religious, hospitals, office, educational, industrial and sports facilities, hotels, monuments and not inhabited. Both indicators: namely, the building condition and building use were aggregated into a recovery index regarding the physical and socio-economic dimensions, respectively. Residential buildings, reconstructed buildings, new buildings, transport, and commercial facilities were considered to be the most important variables for the recovery progress of a city.

Subjects studied: PhD Seminar in Geography (Remote Sensing Sciences); PhD seminar Geoinformatics; Doctoral Seminar: Geoinformatics and GIScience; GIScience Colloquium; Object-based Image Analysis (OBIA); Spatial Concepts and Representation I; Statistical Methods for the Analysis of Geospatial Data; Spatial Analysis of Crime; Scientific Working and Writing; Global Studies - Selected Theories and scientific discourses (lecture series migration); ICA Special Course: How to write a grant proposal; English for the Social Sciences I; English for the Social Sciences II; Business English I; Business English II; English Language Oral Skills; German as a foreign language elementary level I; German as a foreign language elementary level II; German as a foreign language elementary level III; German as a foreign language elementary level IV; German as a foreign language advanced level I; German as a foreign language. Intermediate I (part 1); German as a foreign language. Intermediate I (part 2); Austrian culture and language and French as a foreign language elementary level I.

Committee chair/members

Supervisory Committee

- Univ.-Prof. Dr Thomas Blaschke, Interfaculty Department of Geoinformatics Z-GIS, Paris-Lodron University Salzburg, Austria
- Univ.-Prof. Dr David Alexander, Institute for Risk and Disaster Reduction (IRDR), University College London (UCL), United Kingdom

Reviewed by

- Prof Thomas Blaschke, Interfaculty Department of Geoinformatics Z-GIS,

Paris-Lodron University Salzburg, Austria

- Prof Dr Alexander Fekete, Institute of Rescue Engineering and Civil Protection, Cologne University of Applied Sciences
 - Dr Stefan Lang, Interfaculty Department of Geoinformatics Z-GIS, Paris-Lodron University Salzburg, Austria
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- Professor Cees J. van Westen, Department of Earth Systems Analysis (ITC-ESA)
University of Twente

**September 2007 – Master of Science in Geoinformation Science
March 2009 and Earth Observation**

Specialisation: Urban Planning and Management

Faculty of Geo-Information Science and Earth Observation (ITC),
University of Twente (UT)
Enschede, The Netherlands.

MSc thesis entitled: 'Designing a spatial planning support system for rapid building damage survey after an Earthquake: The case of Bogotá DC, Colombia'

The Master thesis had as main objective design a spatial planning support system (SPSS) for the deployment of trained engineers, architects, technicians, and students of these subjects for a rapid building damage survey in Bogota DC under three different earthquake scenarios (250,500 and 1000 years probability) and to manage the spatial information collected.

Subjects studied: Principles of Geographic Information Systems (GIS); Principles of Remote sensing; RS/GIS Assignment and Case study; Social Statistics; Analysing intra-urban diversity and dynamics – theory; Analysing intra-urban diversity and dynamics – case study; Best practice essay; Developing spatial interventions in urban planning and management – theory; Developing spatial interventions in urban planning and management – case study; Research Skills MSc; Spatial planning support systems and scenario development; Integrated risk assessment; Geo-data integration for UN-Peacekeeping mission; Master of Science research proposal defence and Master of Science research and thesis.

**August 2001 – Graduate Diploma Evaluation of Risk and Disaster Prevention
November 2002**
Universidad de Los Andes
Bogotá DC, Colombia

Pg.D thesis entitled: 'Methodological strategy for the organisation of building inspection groups after an earthquake in Bogota DC, Colombia'

Subjects studied: Characteristics of disasters, disasters and development models, hazard and vulnerability evaluation, risk estimation and analysis, anthropic and industrial risk, disaster and sustainable development, prevention and mitigation measures, early warning systems (EWS) and emergency preparations, management and planning for disaster prevention, political economy and international strategy.

**January/1995- – Bachelor of Architecture
April/2001**
Universidad Nacional de Colombia
Bogotá DC, Colombia

Bachelor thesis entitled: 'Assistance coordination centre for disaster management in Bogotá DC, Colombia'

Subjects studied: Architecture principles, technology, expression, design workshop, theory, history of the architecture, construction techniques, building structures, AutoCAD, the city and the power(context), environmental conditions, climate and architecture, music appreciation (context) specifications and quantity in construction, the technology of concrete, MICROSTATION, elements of environmental design, wood constructions, cost and budgets,

work programming, pathology of buildings, architecture and metal, soils and foundations, landscape design, building with adobe, construction finishing and details, auditing, architectonics aspects, seismic design, and solar energy.

CERTIFICATIONS

2024/04/08	Diversifying Leadership Programme AdvanceHE
2024/02/13	Fellow Higher Education Academy (FHEA) AdvanceHE
2018/05/08	Associate Business Continuity Professional (ABCP) Disaster Recovery Institute International (DRI)

Languages

- **Mother tongue:** Spanish
 - **Other languages:** English (CEF B2 – Fluent speaker); German (CEF B1 – Good working knowledge); Italian (CEF A2 – Beginner); French, and Portuguese (Basic knowledge).
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HONOURS AND AWARDS

- Selected as participant in the Cardiff University Ignites programme funded by the Wellcome Trust. Ignite is a leadership development programme that focuses on enabling people to demonstrate leadership in relation to a positive research culture by building participants' skills, knowledge, and community connections.
 - Invited to be part of the Scientific Advisory board (SAB) of the Risk Institute at Université Grenoble Alpes in Grenoble, France.
 - Selected as participant in the GW4 Crucible 2024 programme: Tackling health inequalities and driving social justice through radical interdisciplinarity. Additional information at: <https://gw4.ac.uk/news/future-research-leaders-selected-to-tackle-health-inequalities-through-radical-interdisciplinarity/>
 - Selected to participate in the Diversifying Senior Leadership Programme organised by AdvanceHE. Additional information at: <https://intranet.cardiff.ac.uk/staff/news/view/2761664-diversifying-senior-leadership-programme>
 - Invited as speaker to the 2022 Risk Summer School organised by the Risk Institute of Université Grenoble Alpes (UGA) in France.
 - Selected based on merits to be part of the 2022 Earthquake Engineering Field Investigation Team (EEFIT) return mission to Nepal.
 - Finalist in the WMO2020 Calendar Competition of photography organised by the World Meteorological Organization (WMO) with the picture entitled: 'La Laguna Azul, en la Cordillera Blanca' (Translated title: The blue lake on the white mountains) taken during fieldwork in the Paron, Lake in Peru.
 - First place in the competition 'Best Poster Award IDRC Davos 2016' with the poster entitled: 'Disaster Management and Resilience in Electric Power Systems: The case of Chile'. 6th International Disaster and Risk Conference IDRC Davos 2016. Davos, Switzerland.
 - Open access fees award 'Resilience Academy 2013-2014' to the manuscript: Tellman, B., Alaniz, R., Rivera, A. and Contreras, D. (2014). Violence as an obstacle to livelihood resilience in the context of climate change. Awarded by UNU-EHS.
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- Attended as the Latino-American representative (on scholarship) in the 2nd International Training Workshop on Space Technology for Disaster Mitigation hosted by the Institute of Remote Sensing and Digital Earth (RADI), the Chinese Academy of Science (CAS), and the Centre on Space Technology for Disaster Mitigation (SDIM). Beijing (China).
 - Attended (on scholarship) the USA (2017), Bangladesh (2013) and Germany (2014) sessions of the Resilience Academy, on the theme of Livelihood Resilience, hosted by UNU-EHS, ICCCAD and the MRF. Dhaka (Bangladesh) and Munich (Germany).
 - Awarded with the One World Scholarship (OWS) - Programme de Bourse Universelle 2012-2013, granted for the Afro-Asian Institute Salzburg (AAI) – Salzburg (Austria).
 - A beneficiary of the program 'Credito-Beca Colfuturo 2012' (Translated title: loan - scholarship Colfuturo 2012), granted for COLFUTURO foundation.
 - Second place in the competition 'Best Poster Award - DK symposium 2012' with the poster entitled: 'Spatial indicators of a recovery process after earthquakes: The case of L'Aquila (Italy)'. The University of Salzburg. Salzburg, Austria.
 - Winners of the international student essay competition 2010, sponsored by the Centre for rebuilding sustainable communities after disasters (CRSCAD), University of Massachusetts (UMASS) with the essay: "GIS in the vulnerability assessment and recovery process in a community with elderly and disable people after a disaster". Boston (USA).
 - Second Place in the '2009 URISA Student Paper Competition' with the paper entitled: 'Designing a spatial planning support system for rapid building damage survey after an earthquake: The case of Bogota DC, Colombia'. Anaheim, USA.
 - Awarded with the Joint Japan/World Bank Graduate Scholarship Program (JJ/WBGSP) 2007.
 - Awarded with Faculty Geo-Information Science and Earth Observation (ITC) scholarship 2007 to attend the 18-month M.Sc. in Geo-information Science and Earth Observation; Specialisation: Urban Planning and Management.
 - Merit decoration 'Cacique Teusacá' granted by the District Mayor of Teusaquillo (Bogotá DC- Colombia) for outstanding participation in the control of public order in providing security and support to the public in the jurisdiction; Bogota DC, July 29, 2005.
 - Attended as the Colombian representative (on partial-scholarship), the course: 'Civil protection actions against Natural Hazards'; organised by the Directorate General for Civil Defence of the Ministry of the Interior of Spain with the sponsorship of the Spanish Agency for International Development Cooperation (AECID). Location: La Antigua – Guatemala (From March 7 to 11, 2005).
 - Attended as the Colombian representative (on scholarship), 'The Ibero-American discussions about habitat, vulnerability and disasters'; organised by the Ibero-American Program of Science and Technology for Development (CYTED) with the sponsorship of AECID. Location: Santa Cruz de la Sierra – Bolivia (From August 30 to September 3, 2004).
 - Attended as the Colombian representative (on partial-scholarship), the course: 'Risk management and catastrophic disasters attention'; organised by la directorate General for Civil Defence of the Ministry of the Interior of Spain with the sponsorship of AECID. Location: Cartagena de Indias – Colombia (From March 23 to April 2, 2004).
 - Acknowledgment for 'the support in the design of the Master Plan of urban facilities for security, defence and justice in the City-Region', by the Secretary of Public Affairs about coexistence in the city, of the Mayor in Bogotá, December 31, 2003. Bogota DC, Colombia.
 - Acknowledgement for 'the commitment, effort and dedication in planning search and rescue (SAR) drills due to collapsed structures' by the Mayor in Bogotá DC; October 17, 18 and 19, 2003. Bogotá DC (Colombia).
 - Granted Meritorious Mention by the Faculty Council of the Faculty of Arts of the National University of Colombia, for my Bachelor thesis: 'Assistance coordination centre for disaster management for Bogota D.C.- Colombia'. August 7, 2001.
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GRANTS AND FELLOWSHIPS

- Multidisciplinary Digital Publishing Institute (MDPI) publication grant. Publication in Geohazards: Automatic sentiment analysis of citizen's comments: The case of Albania Earthquake. Amount: 1400 CHF.
 - Multidisciplinary Digital Publishing Institute (MDPI) publication grant. Publication in Heritage: Exploring the Role of Cultural Heritage in the Recovery of L'Aquila combining topic and sentiment analysis. Amount: 1800 CHF.
 - Multidisciplinary Digital Publishing Institute (MDPI) publication grant. Publication: Contreras, D., Antypas, D., Hervas, J., Wilkinson, S., Camacho-Collados, J., Garnier, P., & Cornou, C. (2025). Post-Disaster Recovery Assessment Using Sentiment Analysis of English-Language Tweets: A Tenth-Anniversary Case Study of the 2010 Haiti Earthquake. *Sustainability*, 17(11), 32. doi:10.3390/su17114967. Amount: 2400 CHF.
 - Ignite Small Grant: "Reduce gender disparity in STEM from kindergarten to Professional life". Amount £2000.
 - Gender Equality Partnerships 2024–25: 'Reducing Gender Disparity in Higher Education in Science and Engineering from Highschool to Higher Education'. Amount £20,468.66.
 - Welsh Crucible Seedcorn Funding Scheme for the project: 'Geospatial Mapping and Analysis of Stroke Events in Wales: A Population-Wide Pilot Study to Identify Spatial Patterns Over the Past 10 Years'. Amount £5,988.21.
 - Global Wales Partnership for the project 'e-MindGuard pilot survey'. This project aimed to pilot a survey among young adults to collect the essential data to tailor the eMindGuard app, a holistic mental health assessment app, to the needs of the target population. July 2024 - February 2025 - Amount £4,697.69.
 - GW4 Crucible Seed Funding Award, Ref. no.: Cru24_01, for the project entitled: 'Does the use of private clinics for elective procedures reduce or accentuate health inequalities? An exploratory qualitative and spatial study'. Amount £3,502
 - GW4 Crucible Seed Funding Award, Ref. no.: Cru24_02, for the project entitled: 'Learning the narratives and expectations of health and care needs for LGBTQ+ older people'. Amount £4,620
 - University of Illinois System Collaboration Funds: Joint Research and Innovation Seed Grant. Proposal entitled: eMindGuard: A Holistic Mental Health Assessment App Integrating Social Media, Environmental, and Locational Data for Precision Well-Being. The aim of this project was to provide a more informed and precise mental health assessment for young adults using social media data, geospatial information, lifestyle factors, and explainable AI techniques. This project took place between the 3rd February 2024 and the 30 April 2025. Amount £31,00 distributed in £15,000 for the Discovery Partners Institute (DPI) at the University of Illinois and £7,500 for the School of Computer Science and another £7,500 for the School of Earth and Environment Sciences at Cardiff University
 - French National Research Agency (Anr-20-Sfri-0007) under the «Investissements D'Avenir» Program, implemented by the Risk Institute of Université Grenoble Alpes (UGA). Travel grant to contribute as speaker at the Risk Summer School from August 29th to 31st, 2022. Amount €1,187.58.
 - Earthquake Engineering Field Investigation Team (EEFIT) travel grant. 2022 Return mission to Nepal after the 2015 Gorkha earthquake. Amount: £2,239.41
 - Multidisciplinary Digital Publishing Institute (MDPI) publication grant. Publication: Contreras, D., Wilkinson, S., & James, P. (2021). Earthquake Reconnaissance Data Sources, a Literature Review. *Earth*, 2(4), 1006-1037. Retrieved from <https://www.mdpi.com/2673-4834/2/4/60>. Amount: 1000 CHF (Swiss Francs).
 - United Nations University – Institute for Environment and Human Security (UNU-EHS) publication grant. Publication: The Integrated Spatial Pattern of Child Mortality during the 2012–2016 Drought in La Guajira, Colombia. *Sustainability*, 11(24), 7190. doi:10.3390/su11247190. Amount: €797. The 17th December 2019.
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- Munich Re Foundation publication grant. Publication: Contreras, D. (2019). The Integrated Spatial Pattern of Child Mortality during the 2012–2016 Drought in La Guajira, Colombia. Sustainability, 11(24), 7190. doi:10.3390/su11247190. Amount: €600. The 16th December 2019.
 - Deutscher Kongress für Geographie (DKG) 2019 (Translated title: German Congress of Geography) 2019 travel grant to present: 'Socio-economic vulnerability to natural hazards: a spatial model including dependencies of critical urban infrastructure' at the session: 'Urban-Rural Infrastructure Interdependencies – Flows of people, services and disaster risks': <https://dkg2019.geographie.uni-kiel.de/index.html%3Fp=4674.html>. Amount: €415. The 1st October 2019.
 - Munich Re Foundation travels grant to attend the Resilience Academy Capstone Conference 2017: Linking Loss & Damage with Livelihood Resilience. Amount: €1100. October 2017.
 - Munich Re Foundation Travel grant to attend the Resilience Academy: Livelihood Resilience 2014. Amount: €900. August 2014.
 - Munich Re Foundation Travel grant to attend the Resilience Academy 2013: Livelihood Resilience 2013. Amount: €1400. September 2013.
 - 'EEFIT research grant 2013' to develop new methods for monitoring recovery after earthquakes through the integration of remote sensing, GIS and ground observations: The case of L'Aquila – Italy. Amount: £1.500. The 3rd July 2013.
 - Bundesministerium für Wissenschaft und Forschung (BM.W_fa) Stipendium' (Translated name: Federal Ministry for Science and Research grant) to present the conference paper entitled: Spatial vulnerability indicators: measuring recovery processes after earthquakes, in the 8th International Conference on Information systems for crisis response and management. Amount: €691.28. The 15th April 2011.
 - 'Österreichische Forschungsgemeinschaft (ÖFG) Stipendium' (translated name: Austrian Research Association Scholarship) to present the paper: GIS in the vulnerability assessment and recovery process in a community with elderly and disable people after a disaster at the Conference on Rebuilding Sustainable Communities with elderly and disabled people after disasters: Haiti after the cameras have gone (2010) organised by the Centre for rebuilding sustainable communities after disasters (CRSCAD), University of Massachusetts (UMASS). Amount: €700. The 6th July 2010.
 - 'Österreichische Forschungsgemeinschaft (ÖFG) Stipendium ' (translated name: Austrian Research Association Scholarship) to present the paper: Designing a spatial planning support system for rapid building damage survey after an earthquake: The case of Bogota D.C., Colombia., at the URISA's 47th Annual conference. Amount: €700. The 29th September 2009.
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RESEACH PROJECTS

- **Reduce gender disparity in STEM from kindergarten to Professional life – (PI).** This project aims to learn from education models implemented since infancy to counteract traditional gender roles and others focused on attracting women already working in science, technology, engineering, and mathematics (STEM) to consolidate their positions as independent researchers in the academy.
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- **Widening participation and outreach: Living in Flood Prone Environments (CO-I).** The School of Earth and Environmental Sciences of Cardiff University public engagement activities aim to boost the health, wealth and wellbeing of Cardiff, Wales, and the wider world. One of the objectives is to improve earth and environmental literacy, including greater recognition of the links between this knowledge and actions to achieve the UN Sustainable Development Goals.
 - **Geospatial Mapping and Analysis of Stroke events in Wales: A Population-Wide Pilot Study to Identify Spatial Patterns Over the Past 10 Years (Co-I).** This project aims to provide insights into the spatial distribution of stroke in Wales to enable tracking stroke trends, highlighting regional disparities in incidences.
 - **'Reducing Gender Disparity in Higher Education in Science and Engineering from Highschool to Higher Education' (GDSE) (PI-Cardiff).** This project aims to investigate and mitigate gender disparity in science and engineering and to foster gender equality as part of Egypt's Vision 2030. The work will involve knowledge transfer workshops, mentorship programmes and community outreach focussed on educating people about the importance of gender equality and its broader societal benefits. The ultimate goal is to help to dismantle stereotypes that discourage female participation in Science, Technology, Engineering, and Mathematics (STEM).
 - **e-MindGuard pilot survey (PI).** This project aimed to pilot a survey among young adults to collect the essential data to tailor the eMindGuard app, a holistic mental health assessment app, to the needs of the target population. The planned survey needed to be piloted to ensure that we use the right tool to collect the data, measure the time needed to complete the survey and confirm that the audience understands the instructions and questions. This project involved to conduct two workshops, one in Cardiff and another one in Chicago.
 - **'Does the use of private clinics for elective procedures reduce or accentuate health inequalities? An exploratory qualitative and spatial study' (Co-I).** This project will explore how the NHS's use of private clinics can be optimised not to perpetuate health inequalities, focusing on access and person-centred care. The relationships between deprivation levels and relative distances to and catchment or service areas of NHS and private healthcare providers will be analysed, contrasting the GW4 region of Wales and the Southwest with London and the Southeast. This research study will determine if, once within a clinic, everyone has the same opportunities for person-centred care to help them achieve the best possible health outcome.
 - **Learning the Narratives and Expectations of Health and Care Needs for LGBTQ+ Older People (Co-I).** This project aims to explore the experiences, perceptions and expectations of LGBTQ+ people regarding ageing and related health needs. This will be achieved through two community engagement events, one in Cardiff and one in Exeter. Using various creative methodologies within the engagement events we will bring together older LGBTQ+ people to scope out their expectations, needs and experiences related to ageing and health and social care.
 - **eMindGuard: A Holistic Mental Health Assessment App Integrating Social Media, Environmental, and Locational Data for Precision Well-Being (PI-Cardiff).** In our digitally interconnected world, the merging of mental health and technology has given rise to innovative solutions aimed at monitoring and enhancing overall well-being. This project introduces an innovative mental health assessment app tailored to the preferences of young adults (18 to 26 years), including college students, who frequently use mobile phones and social media platforms. This app harnesses the potential of social media data, environmental factors and geospatial information to offer a comprehensive evaluation of
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an individual's mental health vulnerability. Additional information at:
<https://illinoisdpi.github.io/eMindGuard/index.html>

- **Learning from Earthquakes: Building Resilient Communities through Earthquake Reconnaissance, Response and Recovery.** Faculty of Science, Agriculture and Engineering, School of Engineering, Newcastle University, Newcastle upon Tyne, United Kingdom (2016-2023). Project funded by Engineering and Physical Sciences Research Council (EPSR). Reference: EP/N034899/1. This project aimed to improve the understanding of earthquake impacts, response and recovery through targeted data gathering in earthquake reconnaissance missions and, through associated research, to better collect, interpret, exploit and disseminate this data. The project was a consortium of Newcastle University, University College of London (UCL) and University of Cambridge and partners from the public and private sector. The partners include governmental institutions, NGOs, risk modellers, engineering consultants, research centres, international Universities and the World Bank (WB). The objectives of the project are:
 - To continue conducting earthquake reconnaissance missions
 - To study earthquake response and recovery by deploying 'return missions'
 - To develop a consistent and workable data collection protocol for storing and sharing the diverse types of information collected in the missions and integrating these with data from other sources.
 - To build a flexible and sustainable spatial data infrastructure (SDI) that implements the developed data collection protocols, manages the resulting data, and makes them available from all past reconnaissance missions as well as new missions.
 - To propose a set of field tools for recording earthquake impact data, response, and recovery information and to ensure that EEFIT members and other Learning from Earthquake programmes are trained in their use and effective adoption.
 - **Social vulnerability to natural hazards and dependence to urban critical infrastructure: a spatial model for the healthcare system in Santiago, Chile.** To develop, apply and validate a spatial model that integrates social vulnerability and dependency of critical infrastructure such as the health care system in urban environments during disasters.
 - **Climate change adaptation (CCA), water resource management and disaster risk reduction (DRR) in La Guajira, Colombia.** Caritas Switzerland planned to strengthen its project portfolio and expand its regional focus to la Guajira, Colombia along with the nexus of climate change adaptation (CCA), water resource management and disaster risk reduction (DRR) to strengthen the rural population's adaptive capacities, claim their rights for water, food and promote civil participation. Additional information at: <https://www.youtube.com/watch?v=wP3u8ht8ql4>
 - **Assessing and Mitigating Earthquake Risk in the Caribbean and Central America (CCARA).** Global Earthquake Model (GEM) Foundation, Pavia, Italy (2016 – 2018). The United States Agency for International Development (USAID) Award No. AID-OFDA-G-16-00149. The project had the aim to improve the understanding of earthquake hazard and risk in Central America and the Caribbean and, in the process, develop local capacities to promote sustainability of the efforts initiated by the programme. To promote the utilisation and application of the results and information generated by the project.
 - **Community Resilience to Disaster: 'Disaster management and resilience in electric power systems'.** Alliance Manchester Business School/ The University of Manchester, Manchester, United Kingdom (2016-2017). Engineering and Physical Sciences Research Council (EPSR). Reference: EP/N034899/1. This project undertook holistic risk analyses
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associated with natural hazards on electricity networks along with identification of mitigation and adaptation measures to manage the arising disasters. This holistic perspective of disaster management and resilience was supported by the development of mathematical models to firstly assess risks related to high impacts low probability events, such as earthquakes and tsunamis, on the electric power systems. These models served to identify an optimal portfolio of preventive and corrective measures that can support the mitigation of impacts and compare different adaptation strategies. Besides classical infrastructure reinforcement, it was assessed how operational measures for disaster management could provide system resilience.

- **Earth Observation for monitoring and assessment of the environmental impact of energy use (ENERGEO).** The main objective of the EnerGEO project was to develop a global observation strategy for monitoring and prediction of the impact of the exploitation of energy resources on the environment and to demonstrate this strategy for a variety of energy resources. Department of Geoinformatics Z_GIS/University of Salzburg, Salzburg, Austria (2009-2013). This project received funding from the European Union's Seventh Framework Programme for research, technological development, and demonstration under grant agreement no 226364. Additional information at: <https://www.copernicus.eu/en/documentation/research-projects/earth-observation-monitoring-and-assessment-environmental-impact>
- **Methods for the Improvement of Vulnerability Assessment in Europe (MOVE) project.** Department of Geoinformatics Z_GIS/University of Salzburg, Salzburg, Austria (2009 –2011). This project received funding from the European Community's Seventh Framework Programme - Grant agreement number 211590 - FP7 – ENV - 2007- 1.
 - To create knowledge, frameworks, and methods for the assessment of vulnerability to natural hazards in Europe
 - To use indices and indicators to help improve societal and environmental resilience placing emphasis on exact, capable measurement and accounting for uncertainties
 - To identify gaps in existing methodologies
 - To produce a conceptual framework that is independent of scale and hazard type.
 - To analyse physical, technical, environmental, economic, social, cultural, and institutional vulnerability measured for specific hazards and at different geographical scales
 - To study floods, temperature extremes, droughts, landslides, earthquakes, wildfires, and storms

Additional information at: <https://cordis.europa.eu/project/id/211590/reporting>

- **Implementation of preparedness, building capacity of emergency response teams and optimisation of emergency response in Bogotá DC, Colombia.** Institute of Risk Management and Climate Change (IDIGER) in Bogota DC, Colombia (2001–2005). The main goal of this project was to reduce the vulnerability of Bogota DC, Colombia, to critical events.

PUBLICATIONS

Peer-reviewed papers

- De Luca, E., Barrett, D., Contreras, D., Hughes, A. M., Turnbull, N., & Williams, A. (2026). Public Involvement Report: Learning the Narratives and Expectations of Health and Care
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- Needs for Older LGBTQ+ People. *Social Sciences*, 15(2), 83. Retrieved from <https://www.mdpi.com/2076-0760/15/2/83>
- **Contreras, D.**, Forino, G., Pezzica, C., Liberatore, F., & Wilkinson, S. (2026). Exploring the role of Cultural Heritage in the Recovery of L'Aquila, combining topic and sentiment analysis (in writing). *Heritage*, 31
 - **Contreras, D.**, Velu, E., Anthypas, D., Landès, M., Fallou, L., Bossu, R., . . . Dushi, E. (2026). Automatic Sentiment Analysis of Citizen's Comments: The case of Albania earthquake (Pre-print in major revisions). *Geohazards*, 14. Retrieved from <https://www.preprints.org/manuscript/202601.0777>
 - Luca, E. D., Barrett, D., **Contreras, D.**, Hughes, A., Turnbull, N., & Williams, A. (2026). Learning the Narratives and Expectations of Health and Care Needs for Older LGBTQ+ People: A Report of Three Community Events Across the Southwest of the United Kingdom (Major revisions). *Social Sciences*.
 - Contreras, D., Reeves, S., Javed, A., & Tiwari, A. (2025). The Role of Environmental Factors and Urban Infrastructure in Young Adult Mental Health: A Systematic Review (Major revisions). *Acta Psychologica*, 35.
 - **Contreras, D.**, Antypas, D., Hervas, J., Wilkinson, S., Camacho-Collados, J., Garnier, P., & Cornou, C. (2025). Post-Disaster Recovery Assessment Using Sentiment Analysis of English-Language Tweets: A Tenth-Anniversary Case Study of the 2010 Haiti Earthquake. *Sustainability*, 17(11), 32. doi:10.3390/su17114967
 - Al Bahri, J., Bankole, O., Muir, D., El Albani, A., Oldroyd, A., **Contreras, D.**, . . . Chi Fru, E. (2024). Clay mineral geochemistry and paleoenvironmental reconstruction across the Cryogenian Sturtian Snowball glaciation. *Precambrian Research*, 410, 107498. doi:<https://doi.org/10.1016/j.precamres.2024.107498>
 - **Contreras, D.**, Bhamidipati, S., & Wilkinson, S. (2023). Social vulnerability and spatial inequality in access to healthcare facilities: The case of the Santiago Metropolitan Region (RMS), Chile. *Socio-Economic Planning Sciences*, 90, 101735. doi:<https://doi.org/10.1016/j.seps.2023.101735>
 - Feliciano, D., Arroyo, O., Cabrera, T., **Contreras, D.**, Valcárcel Torres, J. A., & Gómez Zapata, J. C. (2023). Seismic risk scenarios for the residential buildings in the Sabana Centro province in Colombia. *Nat. Hazards Earth Syst. Sci.*, 23(5), 1863-1890. doi:10.5194/nhess-23-1863-2023
 - Aktas, Y. D., Ioannou, I., Malcioglu, F. S., Kontoe, M., Parammal Vatter, A., Baiguera, M., . . . , **Contreras, D.**,...D'Ayala, D. (2022). Hybrid Reconnaissance Mission to the 30 October 2020 Aegean Sea Earthquake and Tsunami (Izmir, Turkey & Samos, Greece): Description of Data Collection Methods and Damage. *Frontiers in Built Environment*, 8. doi:10.3389/fbuil.2022.840192
 - **Contreras, D.**, Wilkinson, S., Alterman, E., & Hervás, J. (2022). Accuracy of a pre-trained sentiment analysis (SA) classification model on tweets related to emergency response and early recovery assessment: the case of 2019 Albanian earthquake. *Natural Hazards*. doi:10.1007/s11069-022-05307-w
 - **Contreras, D.**, Wilkinson, S., Aktas, Y. D., Fallou, L., Bossu, R., & Landès, M. (2022). Intensity-Based Sentiment and Topic Analysis. The Case of the 2020 Aegean Earthquake. *Frontiers in Built Environment*, 8. doi:10.3389/fbuil.2022.839770
 - **Contreras, D.** (2022). Learning about post-disaster phases via ludic activities: A case study of Santiago, Chile. *International Journal of Disaster Risk Reduction*, 72, 102842. doi:<https://doi.org/10.1016/j.ijdrr.2022.102842>
 - **Contreras, D.**, Wilkinson, S., Balan, N., & James, P. (2022). Assessing post-disaster recovery using sentiment analysis: The case of L'Aquila, Italy. *Earthquake Spectra*, 38 (1), 81-108. doi:10.1177/87552930211036486
 - **Contreras, D.**, Wilkinson, S., & James, P. (2021). Earthquake Reconnaissance Data Sources, a Literature Review. *Earth*, 2(4), 1006-1037. doi:10.3390/earth2040060
 - Pavón Cevallos, F. M., & **Contreras, D.** (2021). Análisis estadístico de simulaciones numéricas de dispersión y caída de ceniza del volcán Cayambe para la determinación de afectación en el sector florícola, Cantón Cayambe, Ecuador. (Translated title: Statistical
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- **Contreras, D.**, Chamorro, A., & Wilkinson, S. (2020). Review article: The spatial dimension in the assessment of urban socio-economic vulnerability related to geohazards. *Nat. Hazards Earth Syst. Sci.*, 20(6), 1663-1687. doi:10.5194/nhess-20-1663-2020
- **Contreras, D.**, Voets, A., Junghardt, J., Bhamidipati, S., & Contreras, S. (2020). The Drivers of Child Mortality During the 2012–2016 Drought in La Guajira, Colombia. *International Journal of Disaster Risk Science*, 11(1), 87-104. doi:10.1007/s13753-020-00255-0
- **Contreras, D.** (2019). The Integrated Spatial Pattern of Child Mortality during the 2012–2016 Drought in La Guajira, Colombia. *Sustainability*, 11(24), 7190. Retrieved from <https://doi.org/10.3390/su11247190>
- Pavón, F., Andrade, S. D., Bernard, B., & **Contreras, D.** (2019). Impacto socioeconómico por lahares y caída de ceniza ante la erupción del volcán Cayambe en la actividad florícola en Cayambe y Pedro Moncayo. (Translated title: Socioeconomic impact due to lahars and ash fall given the eruption of the Cayambe volcano in the floricultural activity in Cayambe and Pedro Moncayo). *Revista Cartográfica*, (98), 123-143. <https://doi.org/10.35424/rcarto.i98.144>
- **Contreras, D.**, Forino, G., & Blaschke, T. (2018). Measuring the progress of a recovery process after an earthquake: The case of L'Aquila, Italy. *International Journal of Disaster Risk Reduction*, 28, 450-464. doi:<https://doi.org/10.1016/j.ijdrr.2017.09.048>
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- **Contreras, D.**, Blaschke, T., Kienberger, S., & Zeil, P. (2013). Spatial connectivity as a recovery process indicator: The L'Aquila earthquake. *Technological Forecasting and Social Change*, 80(9), 1782-1803. doi:<http://dx.doi.org/10.1016/j.techfore.2012.12.001>
- **Contreras, D.** (2005). Renovando el habitat en riesgo. (Translated title: Renewing the habitat at risk). *Revista INVI*, 20(53). doi:<http://revistainvi.uchile.cl/index.php/INVI/article/view/337/881>

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- Alaniz, R., Harootunian, G., & Olson, L. (2015). State of California Policy Brief: Drought as Disaster "2021" Goals—5-Year Plan: Taking Steps towards a Drought-Resilient Future Drought Response, Risk Reduction, Preparedness, Mitigation, & Climate Change Adaptation. In S. Ayeb-Karlsson, A. Avalos, C. Barthelt, M. Bhargava, R. Brilling, David Conn, D. Drexler, Gregg L. Fiegel, K. v. d. Geest, S. H.-. Shephard, Christopher James Lawless, Julie Maldonado, Peter McDonald, **Diana Maria Contreras Mojica**, Jason

Peters, B. Pompeii, P. S. William, C.-H. Wang, David Wrathall, Lynnette Zelezny, & David Zoldoske (Eds.).

Datasets

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- **Contreras, Diana**; Keogh, Conor; Wilkinson, Sean (2023): Sentiment and topic analysis of tweets reporting georeferenced damages in buildings after the Zagreb 2020 earthquake.. Newcastle University. Dataset. <https://doi.org/10.25405/data.ncl.22309621.v1>
- **Contreras, Diana**; Sharma, Shuva; Chandran, Krishna; Adhikari, Rohit; Wilkinson, Sean; Whitworth, Michael; et al. (2023): Sentiment and topic analysis (supervised classification) of Twitter data about the 5th anniversary of the 2015 Gorkha Earthquake. Newcastle University. Dataset. <https://doi.org/10.25405/data.ncl.21900765.v3>
- **Contreras, Diana**; Antypas, Dimosthenis; Camacho-Collados, Jose; Wilkinson, Sean (2022): Comparative sentiment analysis (SA) of original Twitter data posted in English about the 10th anniversary of the 2010 Haiti Earthquake. Newcastle University. Dataset. <https://doi.org/10.25405/data.ncl.19688040.v3>
- **Contreras, Diana**; Hervas, Javier; Balan, Nipun; James, Philip (2022): Sentiment analysis (supervised and unsupervised classification) of original Twitter data posted in English about the 10th anniversary of the 2010 Haiti Earthquake. Newcastle University. Dataset. <https://doi.org/10.25405/data.ncl.19478021.v1>
- **Contreras, Diana**; Wilkinson, Sean; Hervas, Javier; Balan, Nipun; James, Philip (2021): Sentiment analysis (polarity supervised classification) of Twitter data posted in English about the 10th anniversary of the 2010 Maule earthquake in Chile. Newcastle University. Dataset. <https://doi.org/10.25405/data.ncl.15081795.v2>
- **Contreras, Diana**; Wilkinson, Sean; Fallou, Laure; Landès, Matthieu; Tomljenovich, Ivan; Bossu, Rémy; et al. (2021): Sentiment and topic analysis of LastQuake app user's pictures with comments – Zagreb 2020 earthquake. Newcastle University. Dataset. <https://doi.org/10.25405/data.ncl.14687163.v3>
- **Contreras, Diana**; Wilkinson, Sean; Alterman, Evangeline; Hervás, Javier (2021): Sentiment analysis (supervised and unsupervised polarity classification) of Twitter data about the Albania 2019 earthquake. Newcastle University. Dataset. <https://doi.org/10.25405/data.ncl.14604654.v3>
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- Fekete, A., Asadzadeh, A., **Contreras, D.**, Hamhaber, J., Sandholz, S., & Sett, D. (2022). Urban and rural interdependencies. Infrastructure services. In T. McGee (Ed.), Handbook of Environmental Hazards and Society (pp. 213 - 228). UK: Taylor & Francis.
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 - **Contreras, D.**, Maharjan, A., Ghimire, D., Dhungel, R., Whitworth, M., Wilkinson, S., . . . Pomerai, G. d. I. (2023). Discussing post-disaster recovery practices via ludic activities: The case of Nepal. Paper presented at the SECED 2023, Cambridge, United Kingdom. <https://www.seced.org.uk/index.php/seced-2023-proceedings/66-earthquake-disaster-risk-reduction-reconnaissance-and-recovery/810-discussing-post-disaster-recovery-practices-via-ludic-activities-the-case-of-nepal>
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- **Contreras, D.**, Zeil, P., & Kienberger, S. (2009). Spatial vulnerability Indicators applied to recovery and risk reduction after earthquakes: The case of L'Aquila - Italy. Paper presented at the Disaster Risk Reduction for Natural Hazards: Putting Research into Practice London, UK.

Reports

- Aktas, Y., O'kane, A., Köşker, A., Özden, A. T., Vatterli, A. P., Durmaz, B., . . . Putrino, V. (2021). The Aegean earthquake and tsunami of 30 October 2020 Retrieved from <https://www.istructe.org/resources/report/eeft-mission-report-aegean-30-october-2020/>
 - So, E., Babić, A., Majetic, H., Putrino, V., Verrucci, E., **Contreras, D.**, . . . D'Ayala, D. (2020). The Zagreb Earthquake of 22 March 2020 Retrieved from Newcastle, UK: <https://research.ncl.ac.uk/learningfromearthquakes/outputs/So%20et%20al%202020%20The%20Zagreb%20earthquake%20of%2022%20March%202020-compressed.pdf>
 - **Contreras, D.**, Junghardt, J., Voetz, A., & Smith, P. (2018). Assessment of Climate Change Impacts for Project Planning in La Guajira, Colombia. Retrieved from: https://www.researchgate.net/publication/331802288_Assessment_of_Climate_Change_Impacts_for_Adaptation_Opportunities_in_La_Guajira_Colombia
 - **Contreras, D.**, Villar, M., Romero, L., Salgado, D., Mousori, M & Tokica, M. (2018). Reporte del Taller para la Evaluación Participativa del Riesgo sísmico y la Resiliencia en
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San José, Costa Rica (Translated title: Report on the Workshop for the Participatory Evaluation of Earthquake Risk and Resilience in San Jose, Costa Rica). Retrieved from: https://www.academia.edu/38552093/Reporte_del_Taller_para_la_Evaluaci%C3%B3n_Participativa_del_Riesgo_S%C3%ADsmico_y_la_Resiliencia_en_San_Jose_Costa_Rica

- Khazai, B., Anhorn, J., Burton, C. G., Valcarcel, J., & **Contreras, D.** (2017). Resilience Performance Scorecard (RPS) - Summary Retrieved from https://www.preventionweb.net/files/57083_gemrpsmethodologypublished.pdf
- Musori, M., **Contreras, D.**, Burton, C., Villacis, C., & Dima, B. (2017). Report on the workshop for the participatory evaluation of earthquake risk and resilience in Addis Ababa, Ethiopia. Retrieved from http://www.preventionweb.net/files/55006_musorietal2017reportontherpsinaddis.pdf
- Adams, H., Ahmed, I., Alaniz, R., Andrei, S., Barthelt, C., Bhargava, M. **Contreras, D.**, . . . Zommers, Z. (2015). Livelihood resilience in a changing world – 6 global policy recommendations for a more sustainable future (S. Ayeb-Karlsson, T. Tanner, K. v. d. Geest, & K. Warner Eds.). Retrieved from https://www.researchgate.net/publication/302488441_Livelihood_resilience_in_a_changing_world__6_global_policy_recommendations_for_a_more_sustainable_future
- Tellman, B., Rivera, A., Alaniz, R., & **Contreras, D.** (2014). Violence as an obstacle to livelihood resilience in the context of climate change. Retrieved from <http://collections.unu.edu/view/UNU:2859>

Thesis

- **Contreras, D.** (2015). Spatial Indicators of Recovery after Earthquakes. (Dr.rer.nat.), University of Salzburg Austria.
- **Contreras, D.** (2009). Designing a spatial planning support system for rapid building damage survey after an earthquake: the case of Bogotá D.C., Colombia. (Master of Science), University of Twente, Enschede. Retrieved from http://www.itc.nl/library/papers_2009/msc/upm/contreras.pdf
- **Contreras, D.** (2002). Estrategia metodológica para la conformación de Grupos Inspectores de edificaciones después de un sismo (Translated title: Methodological strategy for the organization of building inspection groups after an earthquake). Especialista en Evaluación de Riesgos y Prevención de Desastres (Translated degree: Graduate Diploma Evaluation of Risk and Disaster Prevention), Universidad de Los Andes, Bogotá D.C.
- **Contreras, D.** (2001). Base Coordinadora de asistencia para la atención de desastres. (Translated title: Assistance coordination centre for disaster management). Arquitecta (Translated degree: Architect), Universidad Nacional de Colombia Bogotá D.C.

Government document

- **Contreras, D.** (2003). Plan Maestro de Seguridad, Defensa y Justicia para Bogotá D.C., Colombia - Componente: Atención de Emergencias - equipamientos urbanos (Translated title: Master Plan of Security, Defense and Justice for Bogota D.C., Colombia - Component: Emergency response - urban facilities) Bogotá D.C., Colombia IDIGER

Manuals, handbook, magazine articles

- Vinchon, C., Alexander, D., Barbat, A., Cardona, O., Carreño, M., **Contreras, D.**, . . . Zehra, R. (2011). Assessing vulnerability to natural hazards in Europe: From Principles
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to Practices. A manual on concept, methodology and tools: European Commission DG Environment.

- **Contreras, D., & Kienberger, S. (Eds.). (2011).** Handbook of Vulnerability Assessment in Europe: European Commission DG Environment.
- **Contreras, D. (2006).** "Volcán Galeras hábitat en riesgo". (Translated title: Galeras volcano – Habitat in risk). Revista de arquitectura - El Cable. Manizales, Colombia, Universidad Nacional de Colombia - Manizales: 101 - 118.

Blogs

- **Contreras, D. (2018).** The fight of the WAYUU ethnic Community against the DROUGHT in La Guajira, Colombia. Retrieved from <https://dcontrerasster.wixsite.com/website/single-post/2016/05/03/Staircases-to-sweep-you-off-your-feet>
- **Contreras, D. (2018).** Popayan, the White City in Colombia, 35 Years after the Earthquake. Retrieved from <https://dcontrerasster.wixsite.com/website/single-post/2016/05/03/Architecture-where-design-meets-engineering>
- **Contreras, D. (2015).** Wiederaufbau nach dem Erdbeben in L'Aquila? Analyse mit GIS-Daten (translated title: Reconstruction after the earthquake in L'Aquila? Analysis with GIS data). In gis.point. Retrieved from <https://gispoint.de/blog/blog-einzelansicht/1649-wiederaufbau-nach-dem-erdbeben-in-laquila-analyse-mit-gis-daten.html>

Tutorials

- **Contreras, D., & Wilkinson, S. (2019).** Field Investigation Missions - FTP site tutorial - External users In. Newcastle upon Tyne, United Kingdom (UK): Newcastle University https://research.ncl.ac.uk/learningfromearthquakes/outputs/FTP_site_tutorial_external%20users.pdf
- **Contreras, D., & Wilkinson, S. (2019).** Field Investigation Missions - FTP site tutorial - Internal users In. Newcastle upon Tyne, United Kingdom (UK): Newcastle University

TEACHING EXPERIENCE

- Lecturer (Assistant Professor) in Geospatial sciences: Module: GIS, map and analytical skills – autumn semester (2021 – ongoing); Exposure and physical and social vulnerability and risk management (2023- ongoing) and communicating hazard and risk and tools and technologies to support hazard and risk mapping (2023-2024) interaction of natural, environmental sciences and geography with social sciences (2024) at Cardiff university.
 - Guest Lecturer – School of Engineering – Newcastle University. March 2019. Lecture title: 'Measuring the progress of a recovery process after an earthquake: The case of L'Aquila, Italy'.
 - Reviewer for PhD Thesis (2018): 'Piloting the Disaster Resilience framework for the Latin America and Caribbean'. IUSS Scuola Universitaria Superiore Pavia. Thesis Submitted in Partial Fulfilment of the Requirements for the Degree of Doctor of Philosophy in Risk and Emergency Management.
 - Deputy/Interim Master Thesis Coordinator – Master thesis supervisor and Lecturer. UNIGIS Latin America - University of Salzburg, Austria and Universidad San Francisco de Quito, Ecuador. Lecturer for the elective module: GIS, risk and disasters and master thesis Supervisor for the topics: hazard, vulnerability, risk, preparedness, and climate change. The course was divided into six lessons: introduction, hazard, vulnerability, risk, prevention, mitigation, preparedness, and recovery. The objective of the course was to teach the students how to apply the GIS functionalities for hazard, vulnerability and risk
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assessment, as well as preparedness, emergency response, pre-impact recovery planning and post-disaster recovery assessment. Each lesson was divided into two parts: theory and practice. The practice includes collecting data from open sources, analysis of papers, vulnerability and risk analysis, spatial analysis to determine service areas for emergency response and spatial assessment of the progress of the post-disaster recovery. I was an advisor for the research and theses of MSc students who write their thesis on the topics of hazard zonation, vulnerability and risk assessment, climate change and risk due to natural phenomena, preparedness, emergency response and security.

Co-supervision of PhD students

1. S, V, A. (2025 - 2028). An integrated approach for assessing exposure and vulnerability to urban floods: Exploring potential transport-led strategies in Delhi. (PhD). Indian Institute of Technology Delhi, Delhi, India.

Master Students under my supervision

2. Whaley, M. (2023). An assessment of emergency response and recovery, following the Zagreb 2020 earthquake, using a sentiment and topical analysis. School of Earth and Environmental Sciences Cardiff, United Kingdom, Cardiff University Master of Sciences 73.
 3. Cicco, F. D. (2023). Assessing recovery through Sentiment Analysis using social media: a case study of the 9th and 10th Anniversary of the Christchurch 2011 earthquake. School of Earth and Environmental Sciences Cardiff, United Kingdom, Cardiff University Master of Sciences 57.
 4. Cadena, M. (2020). Análisis de localización óptima de albergues posterior a un terremoto usando SIG: Estudio de caso Portoviejo, Ecuador. Translated title: Optimal Allocation Analysis for shelter after an Earthquake using GIS: Case Study Portoviejo, Ecuador (Master of Science (Geographical Information Science y Systems) – MSc (GIS)). UNIGIS Latin America (Universidad San Francisco de Quito - Universidad de Salzbargo) Quito, Ecuador.
 5. Mosquera, D. (2020). *Optimisation of a tsunami evacuation plan, the case of Cap Haitian, Haiti*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)). UNIGIS Latin America (Universidad San Francisco de Quito - Universidad de Salzbargo) Nairobi, Kenya.
 6. Martínez, J. (2020). *Análisis Espacial de la Relación de las Unidades de Policía Comunitaria e índices de delincuencia en Quito (Ecuador)*. Translated title: *GIS-based analysis of the relationship between location of Community Police Units and crime rates in Quito (Ecuador)*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)). UNIGIS Latin America (Universidad San Francisco de Quito - Universidad de Salzbargo) Quito, Ecuador.
 7. Ulloa, P. (2019). *SIG aplicado al Análisis de la susceptibilidad por Deslizamientos del Oleoducto Transecuatoriano: Tramo Quito-Santo Domingo (Ecuador)*. Translated title: *GIS applied to the susceptibility analysis due to landslides of the Trans-Ecuadorian Pipeline: Quito-Santo Domingo Section (Ecuador)*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)), UNIGIS Latin America (Universidad San Francisco de Quito - Universidad de Salzbargo) Quito, Ecuador. Retrieved from https://issuu.com/unigis_latina/docs/tesis_ulloa1
 8. Pavón, F. (2019). *Modelamiento del impacto de lahares y ceniza del volcán Cayambe en el sector florícola, del canton Cayambe, Ecuador*. Translated title: *Modeling of the impact of lahars and ash from the Cayambe volcano in the floricultural sector, Cayambe canton, Ecuador*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)). UNIGIS Latin America (Universidad San Francisco de Quito - Universidad de Salzbargo) Quito, Ecuador. Retrieved from https://issuu.com/unigis_latina/docs/pavon_fernando
 9. Corona, D. (2018). *Análisis Retrospectivo a Procesos de Contribución de Valorización en Bogotá D.C., Colombia*. Translated title: *Retrospective analysis to contributory processes of valorisation in Bogota D.C., Colombia*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)). UNIGIS Latin America (Universidad San Francisco de Quito - Universidad de Salzbargo) Bogota, Colombia. Retrieved from https://issuu.com/unigis_latina/docs/rozo_diana_
 10. Reyes, M. (2018). *Zonificación de Amenazas por deslizamientos en la cuenca del rio Mira, Ecuador*. Translated title: *Hazard zonation due to landslides in river basin Mira, Ecuador*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)), UNIGIS Latin America (Universidad San Francisco de Quito - Universidad de Salzbargo) Quito, Ecuador.
 11. Sampedro, M. C. (2018). *Comparison of Three Image Classification Approaches for Land Use and Land Cover (LULC). A case study of the agricultural area of San Cristobal Island, Galapagos Islands, Ecuador*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)), UNIGIS Latin America (Universidad San
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- Francisco de Quito - Universidad de Salzburgo) Quito, Ecuador. Retrieved from https://issuu.com/issu_karl/docs/tesis_csampedro.docx
12. Salazar, J. (2016). *SIG Aplicado a la Zonificación de la Amenaza por Deslizamiento en la ciudad de Quito*. Translated title: *GIS applied to the zoning of the landslide hazard in the city of Quito*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)), UNIGIS Latin America (Universidad San Francisco de Quito - Universidad de Salzburgo) Quito, Ecuador. Retrieved from https://issuu.com/unigis_latina/docs/merged
 13. Schreckinger, J. (2016). *Evaluación de la Exposición del Suministro de Agua Potable por Erupción del Volcán Cotopaxi, Ecuador*. Translated title: *Evaluation of the exposure of drinking water supply by eruption of the Cotopaxi volcano, Ecuador*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)), UNIGIS Latin America (Universidad San Francisco de Quito - Universidad de Salzburgo) Quito, Ecuador. Retrieved from https://issuu.com/unigis_latina/docs/schrinker
 14. Romo, S. (2015). *Estimación del Riesgo por Inundación en la Ribera del Río Mulato (Mocoa-Colombia)*. Translated title: *Assessment of flood risk on the banks of the Mulato river (Mocoa-Colombia)*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)), UNIGIS Latin America (Universidad San Francisco de Quito - Universidad de Salzburgo), Quito, Ecuador. *Tesis nominada para el premio UNIGIS 2015*. Retrieved from https://issuu.com/unigis_latina/docs/merged_11_97
 15. Coca, O. (2015). *Evaluación de la Amenaza y Vulnerabilidad por Erosión Costera Usando Herramientas SIG. Pacífico versus Caribe colombiano*. Translated Title: *Hazard and vulnerability assessment due to coastal erosion using GIS Tools. Pacific versus Colombian Caribbean*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)), Universidad de Salzburgo, Quito, Ecuador. *Tesis nominada para el premio UNIGIS 2015*.
 16. Menjivar, L. (2016). *Evaluación de la Exposición a Deslizamientos de la Red Vial Primaria en el Salvador*. Translated title: *Evaluation of the exposure to landslides of the primary road network in El Salvador*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)), UNIGIS Latin America (Universidad San Francisco de Quito - Universidad de Salzburgo) Quito, Ecuador.
 17. Gallego, A. (2015). *SIG aplicado a la zonificación de amenazas por deslizamientos en la vía Aloag – Tandapi (Ecuador)*. Translated title: *GIS applied to the zoning of landslide hazard in the Via Aloag - Tandapi (Ecuador)*. (Master of Science (Geographical Information Science y Systems) – MSc (GIS)), (Universidad San Francisco de Quito - Universidad de Salzburgo) UNIGIS Latin America Quito, Ecuador. Retrieved from https://issuu.com/unigis_latina/docs/gallegos

Co-supervision of Master students

- Aryal, R. (2024). Disaster management with geo-spatial mapping and visualisation of social media data using natural language processing. Department of Geomatics Engineering. Kathmandu, Nepal, Kathmandu University. M.E. Geoinformatics, DoGE.
- Torres, L. (2015). *SIG aplicado a la zonificación por amenaza de inundación en la cuenca del río Polochic, Alta Verapaz, Guatemala*. Translated title: *GIS applied to zoning due to flood hazard in the Polochic river basin, Alta Verapaz, Guatemala*. (Magister en Sistemas de Información Geográfica). Universidad San Francisco de Quito, Quito, Ecuador.

Bachelor Students under my supervision

1. Powell, I. G. (2025). *Are leisure boat maintenance facilities responsible for an increase in sediment contamination, through antifouling paint leaching, and what are the wider effects on non-target species and ecosystems?*. School of Earth and Environmental Sciences. Cardiff, United Kingdom. Cardiff University. Bachelor in Environmental Geography: 69.
 2. Goodison, E. (2025). *The urban heat island effect in Cardiff and London: A comparative analysis*. School of Earth and Environmental Sciences. Cardiff, United Kingdom. Cardiff University. Bachelor in Physical Geography: 45.
 3. Zoysa, S. d. (2025). *Assessing climate change as the main driver of increasing wildfire frequency and intensity on Mt Kilimanjaro*. School of Earth and Environmental Sciences. Cardiff, United Kingdom. Cardiff University. Bachelor in Physical Geography: 58.
 4. Atyeo-Canter, K. (2024). *The influence of wealth on the impacts of sea level rise in three coastal communities in Wales of varied economic status*. School of Earth and Environmental Sciences Cardiff, United Kingdom, Cardiff University. Bachelor in Environmental Sciences: 39.
 5. Davies, H. (2024). *The evolution of maps and their future*. School of Earth and Environmental Sciences Cardiff, United Kingdom, Cardiff University. Bachelor in Physical Geography: 69.
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6. Howes, O. (2024). Assessing the environmental footprint of students in Cardiff: A path to sustainable university life. School of Earth and Environmental Sciences Cardiff, United Kingdom, Cardiff University. Bachelor in Physical Geography: 67.
7. Kett-White, E. (2024). The environmental footprint of diets according to social economic status in Wales, United Kingdom School of Earth and Environmental Sciences Cardiff, United Kingdom, Cardiff University. Bachelor in Physical Geography: 71.
8. Nunn, J. (2024). Exploring the dynamics of the vineyards of coastal Provence: A comparison of organic and conventional viticulture. School of Earth and Environmental Sciences Cardiff, United Kingdom, Cardiff University. Bachelor in Environmental Sciences: 43.
9. Phillips, E. (2024). The impact of meat consumption on deforestation and land use change and assessing public perceptions of meat consumption and environmental health. School of Earth and Environmental Sciences Cardiff, United Kingdom, Cardiff University. Bachelor in Environmental Geography: 63.
10. Smith, E. (2024). Spatial analysis of the reconstruction progress of urban facilities in Nepal after the Gorkha Earthquake (in progress). School of Earth and Environmental Sciences Cardiff, United Kingdom, Cardiff University. Bachelor in Physical Geography.
11. Anson, P. (2023). *Socio-economic impact on countries affected by the 2004 Indian Ocean tsunami*. (Bachelor in Environmental Sciences). Cardiff University Cardiff, United Kingdom.
12. Burton, E. (2023). *The Causes and Impacts of the 2020 California Hennessey Fire*. (Bachelor in Environmental Sciences). Cardiff University Cardiff, United Kingdom.
13. Howells, M. (2023). *Does economic development damage the environment? a case study into Nigeria*. (Bachelor in Environmental Sciences). Cardiff University Cardiff, United Kingdom.
14. Owen, R. (2023). *An investigation into invasive species impact on Ancient Woodland's soil and ecology*. (Bachelor in Environmental Sciences). Cardiff University Cardiff, United Kingdom.

Bachelor Students under my co-supervision

- Keogh, C. (2020). New Technologies for hazard surveys. (Bachelor of Civil and Structural Engineering). Newcastle University, Newcastle upon Tyne, England.
 - Alterman, E. (2020). Digital Humanitarianism': Exploring the use of social media and critically analysing the use of this data for post-disaster needs and damage assessment after earthquakes. (Bachelor of Civil and Structural Engineering), Newcastle University, Newcastle upon Tyne. The United Kingdom (UK).
 - Guest Lecturer – Selected topics. Interfaculty Department of Geoinformatics Z_GIS – University of Salzburg, Austria. The 19th November 2015. Lecture: 'Learning with board games about post-disaster recovery phases'.
 - Guest Lecturer – Selected topics. Interfaculty Department of Geoinformatics Z_GIS – University of Salzburg, Austria. 24th November 2014. Lecture: 'Spatial indicators of Recovery after Earthquakes: The case of L'Aquila – Italy'.
 - Lecturer. Servicio Geológico Colombiano – UNIGIS Latin-America / University of Salzburg. Bogotá D.C. – Colombia. 3rd to 7th December 2012. Course: SIG y análisis de riesgos frente a desastres (Translated title: SIG and risk analysis for disaster management).
 - Teacher. The English Centre. Salzburg, Austria. 26th September 2011 to 27th February 2012. Spanisch für Kinder (Translated title: Spanish for children). I taught Spanish to Children between the ages of 4 and 8 years. The course was two hours per week. The course included theory and practical exercises.
 - Trainer. Institute of Risk Management and Climate Change (IDIGER). Bogotá DC – Colombia. From the 3rd January to 30th December 2005. First responder. The training session was one hour.
 - Trainer. Institute of Risk Management and Climate Change (IDIGER). Bogotá DC – Colombia. 15th November 2002 – 28th March 2003. Building Damage Survey after earthquakes. The training session was three hours.
 - Teaching assistant. Postgraduate courses – National University of Colombia, Bogotá DC, Colombia. 3rd July – 22nd December 2000. Courses: On-site engineer, land use plan for Bogotá DC (Colombia), accessibility with safety to the physical environment for physically challenged people, and pathology of buildings.
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PROFESSIONAL MEMBERSHIPS

- The Disaster Recovery Institute International (DRI) - Associate Business Continuity Professional (ABCP)
 - UNU-EHS/ Munich Re Foundation Resilience Academy
 - Fellow from COLFUTURO foundation.
 - Fellow from Afro-Asian Institute (AAI) – Salzburg, Austria
 - University of Twente (UT) - International Institute for Geo-Information Science and Earth Observation (ITC) Alumni.
 - The Earthquake Engineering Field Investigation Team (EEFIT): 2020 - 2023
 - Earthquake Engineering Research Institute (EERI) – Regular membership: 2021-2023
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REVIEWER - JOURNALS

- Applied Sciences
 - Applied Computing and Informatics
 - Bulletin of Earthquake Engineering
 - Bulletin of the New Zealand Society for Earthquake Engineering
 - Cartography and Geographic Information Science (CaGIS)
 - Climate Risk Management
 - Disasters
 - Disaster Prevention and Management (DPM)
 - Earthquake Spectra
 - Economics of disasters and climate change
 - Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards
 - Geosciences Journal
 - Ingenieria
 - International Journal of Disaster Risk Reduction (IJDRR)
 - International Journal of Environmental Research and Public Health (IJERPH)
 - Journal of Progress in Disaster Science
 - Journal of Hydrology
 - Natural Hazards (NatHaz)
 - Public administration
 - Remote Sensing
 - Scientific reports
 - Social Sciences
 - Sustainable and Resilient Infrastructure
 - Technological Forecasting and Social Change (TFSC)
 - Water
 - Transactions in GIS
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PARTICIPATION IN RESEARCH EXPEDITIONS

- Manobier, Wales (2025)
 - Lurca and Cisterna, Spain (2024)
 - Pembrokeshire, UK (Laugharne and St David's head 2023)
 - Kos, Greece (2023)
 - Nepal (Kathmandu; Bhaktapur; Patan, Gorkha and Chiplesti, 2022)
 - Pembrokeshire, UK (Laugharne, Solva and Llys-y-Frân Reservoir, St David's head 2022)
 - Lima and Huaraz, Perú (2019)
 - La Guajira, Colombia (2017, August 2018, September 2018)
 - Popayan, Colombia (January 2018)
 - L'Aquila, Italy (2010, 2012, 2014, 2016)
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- Dhaka, Bangladesh (2013)
 - Galeras Volcano, Colombia (2006)
 - Santo Domingo, The Dominican Republic (2005)
 - Santa Marta, Colombia (2000)
 - Ciudad Perdida, Colombia (1999)
 - Armenia, Colombia (1999)
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SKILLS

Computer literate

- Proficient in GIS software such as ArcGIS Pro, Arc Map, and conversant with QGIS
 - Proficient in Learning Central Ultra, Zoom, Teams, Mentimeter,
 - Proficient in statistical software such as SPSS
 - Proficient in the use of the Web Content Management System (CMS): Terminal Four site manager
 - Proficient in the use of MonkeyLearn (text classification with machine learning)
 - Proficient in the use of software tools for publishing and managing bibliographies, citations and references: EndNote 20
 - Experience with graphics software such as AutoCAD, Corel, Photoshop, Freehand and Indesign.
 - Proficient in the use of all versions of Windows and MS Office.
 - Conversant with eCognition
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SOCIAL/PERSONAL SKILLS

- Cultural knowledge, language skills, empathy, public relations, and leadership.
 - Experience in finding sponsorships, planning, and monitoring.
 - Communicative ability, able to work and cooperate in multi and cross-cultural teams.
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FREELANCE WORK EXPERIENCE

- Advisor for international students at the Austrian Student Union (OEH - Salzburg) in charge of coordinating the 'buddy program' and organising activities to favour the integration of international students into the city.
 - Logistical and administrative support in activities arranged by the Austrian company 'Latino Mio' (Translated title: My latin).
 - Landscape design in GIA consultores LTDA (Private Colombian consulting company).
 - Layout of flyers and edition of risk management and business continuity plans in private companies in SEA Asesores empresariales (Private Colombian consulting company).
 - Layout of flyers and posters about how to develop risk maps in community, hazard materials and first aids, to the districts of Antonio Nariño, Fontibón and Rafael Uribe in Bogotá DC in Riesgos Bogotanos (Private Colombian consulting company).
 - Layout and edition of the booklet: 'Guía de preparativos de respuesta a emergencias por terremoto' (Translated title: Preparedness guidebook about emergency response after an earthquake) in EPM - Bogotá Telecomunicaciones S.A. outsourced by Germán Darío Tapia Muñoz (private Colombian consultant).
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VOLUNTEERISM

- Member of the RISK Institute's Scientific Advisory Board of the Université Grenoble Alpes in France since 2023 - ongoing
 - Member of the equality, diversity and inclusion (EDI) Committee at the School of Earth and Environmental sciences at Cardiff University.
 - Vice-chairman Earthquake Engineering Field Investigation Team (EEFIT). Since 2022 - 2023.
 - Community manager of Twitter account of the Resilience Academy: @ResilienceAcad sponsored by Munich Re Foundation and co-organised by UNU-EHS and ICCCAD. This Twitter account promotes information regarding climate change, loss and damages, adaptation, coping capacity, and environmental migration (from 2017 and onwards). 2017 – ongoing.
 - Active logistical and administrative support in intercultural activities for immigrant women living in Salzburg, arranged by the social organisation 'Somos Salzburg' (Translated title: We are Salzburg) (From 2010 to 2014).
 - Spanish presenter in a dual language radio program (German and Spanish): Willkommen in Salzburg. Inforadio von und für Neo-Salzbürgerinnen (Translated title: "Welcome in Salzburg. Information in Radio for and to new women in Salzburg), aimed at immigrant women living in Salzburg and broadcasted by Radiofabrik at 107,5 & 97,3 MHz and Cable 98,6 MHz (<http://www.radiofabrik.at>) (From 2011 to 2013).
 - Leader of the Emergency Brigade at IDIGER (2006 - 2007).
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CONFERENCE PRESENTATIONS

- **Contreras, D.**, Antypas, D., Bossu, R., Landès, M., Wilkinson, S., Hervas, J., & Camacho-Collados, J. (2024). Feasibility of earthquake impact assessment using automatic sentiment and topic analysis. The case of 2023 Morocco Earthquake. Paper presented at the 39th General Assembly of the European Seismological Commission (ESC 2024), Corfu, Greece.
 - **Contreras, D.**, Veliu, E., Fallow, L., Bossu, R., Landès, M., & Bhamidipati, S. (2023). Citizen's reports sentiment and topic analysis. Abstract submitted to the symposium: The case of the November 26, 2019 Mw6.4 Durres, Albania Earthquake: Regional Seismicity, Regional Geodynamics and Seismic Hazard (ISDE-2023). Tirana, Albania. https://www.youtube.com/watch?v=61Bpogosa_A&t=1264s
 - **Contreras, D.**, Wilkinson, S., Bhalan, N., James, P., & Hervás, J. (2021). Assessing Post-disaster Recovery Using Sentiment Analysis (SA). The cases of L'Aquila (Italy), Chile and Haiti Paper presented at the 17th World Conference on Earthquake Engineering (17WCEE), Sendai, Japan. <https://www.youtube.com/watch?v=WbhlTP8HeLA>.
 - **Contreras, D.**, Wilkinson, S., Alterman, E., & Hervás, J. (2021). Performance of a pre-trained sentiment analysis (SA) model on tweets related to emergency response and early recovery. The case of 2019 Albanian Earthquake. Paper presented at the 37th General Assembly of the European Seismological Commission (ESC 2021), Athens, Greece. <https://www.youtube.com/watch?v=93rXMLken9U&t=542s>
 - **Contreras, D.**, Wilkinson, S., Atkas, Y., Fallou, L., Bossu, R., & Landès, M. (2021). Intensity-based sentiment analysis. The case of the 2020 Aegean earthquake. Paper presented at the 37th General Assembly of the European Seismological Commission (ESC 2021), Athens, Greece. <https://www.youtube.com/watch?v=BS4CdVbZ9FI>
 - **Contreras, D.**, Wilkinson, S., Fallou, L., Landès, M., Tomljenovich, I., Bossu, R., . . . James, P. (2021). Assessing Emergency Response and Early Recovery using Sentiment Analysis (SA). The case of Zagreb, Croatia. Presentation at the 1st Croatian Conference on Earthquake Engineering (1CroCEE) 2021. Zagreb, Croatia: University of Zagreb. <https://www.youtube.com/watch?v=fDNwgtH94Gc&t=191s>
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- Wilkinson, S., So, E., Putrino, V., **Contreras, D.**, Herak, M., Savor, M., . . . Babić, A. (2021). Remote Earthquake Reconnaissance Feasibility Study: Zagreb earthquake of March 2020. Presentation at SECED-EEFIT. London, United Kingdom (UK):
 - Aktas, Y., O'kane, A., Kazantzidou-Firtinidou, D., **Contreras, D.**, Sevil, F., Cels, J., . . . Putrino, V. (2020). 2020 Aegean Earthquake and Tsunami Mission. Presentation at IstructE. London, United Kingdom (UK).
 - **Contreras, D. (2019)**. Socio-economic vulnerability to natural hazards: a spatial model including dependencies of critical urban infrastructure. Presentation at Deutscher Kongress für Geographie (DKG) 2019 (Translated title: German Congress of Geography). Conference: Kiel, Germany.
 - **Contreras, D.**, Villar-Vega, M., Romero, L., Salgado, D., Castillo, R. (2019). Participatory Assessment of Seismic Risk and Resilience in Costa Rica. Presentation at I-REC 2019 Conference. Gainesville, USA.
 - **Contreras, D., (2019)**. Learning about post-disaster recovery by serious games. Presentation at I-REC 2019 Conference. Gainesville, USA.
 - **Contreras, D., (2018)**. Aprendiendo sobre recuperación post-desastre. Aprendiendo sobre recuperación Jugando. (Translated Title: Learning about post-disaster recovery. Learning about recovery with serious games). Organised by the Chilean Commission of Scientific and Technological Research (CONY CIT) in the framework of the Dissemination and Appreciation of the Science and Technology (EXPLORA) project. Santiago, Chile.
 - **Contreras, D., (2018)**. How to built-up resilience. The case of L'Aquila – Italy. Presentation at Colunga Foundation. Organised by CIGIDEN. Santiago, Chile.
 - **Contreras, D., (2018)**. Impactos del Cambio Climático en La Guajira – Colombia (Translated title: The Impacts of Climate Change in La Guajira – Colombia) Presentation at Pastoral Social Office in Riohacha/ Caritas Suiza. Riohacha, Colombia.
 - **Contreras, D., (2018)**. Los determinantes de la mortalidad infantil durante la sequía en La Guajira – Colombia (Translated title: The drivers of the child mortality during the Drought in La Guajira – Colombia) Presentation at Universidad Antonio Nariño. Ibagué, Colombia.
 - **Contreras, D., (2018)**. Ellos previenen, nosotros nos preparamos y todos respondemos a los desastres (Translated title: They prevent, we prepare and we all respond to disasters) Presentation at Universidad del Tolima. Ibagué, Colombia.
 - **Contreras, D., (2018)**. Oportunidades de Generar Conocimiento en Gestión del Riesgo desde la Academia (Translated title: Opportunities to Generate Knowledge in Risk Management from the Academy). Presentation at Universidad del Tolima. Ibagué, Colombia.
 - **Contreras, D., (2017)**. Global Earthquake Model (GEM) Foundation. Presentation at 100 Resilience Cities (100 RC). New York, USA.
 - **Contreras, D., (2017)**. The drivers of the child mortality during the Drought in La Guajira – Colombia. Presentation at the Resilience Academy – Capstone Conference. Washington DC, USA
 - Villacis, C & **Contreras, D., (2017)**. Evaluación participativa de la resiliencia. Casos de Estudio: Quito, Ecuador y Lalitpur Submetropolitan City (LSMC). (Translated title: Participatory assessment of Resilience, the cases of Quito, Ecuador and Lalitpur ciudad submetropolitana). Presentation at the kick-off meeting of the CCARA project. San Jose, Costa Rica.
 - Burton, C.G. & **Contreras, D., (2017)**. Introducción a la vulnerabilidad social y el riesgo integrado (Translated title: Introduction to the social vulnerability and integrated risk). Presentation at the kick-off meeting of the CCARA project. San Jose, Costa Rica.
 - Despotaki, V. & **Contreras, D. (2016)**. “Vuelta a la normalidad”, modelación de la recuperación después de un terremoto (Translated title: “Back to the normality”, modeling the recovery after an earthquake). San Jose, Costa Rica. Presentation at the kick-off meeting of the CCARA project. San Jose, Costa Rica.
 - **Contreras, D., (2016)**. Evaluación del Riesgo Sísmico en América Central y el Caribe (Translated title: Assessing and Mitigating Earthquake Risk in the Caribbean and Central
-

America). Presentation at the kick-off meeting of the CCARA project. San Jose, Costa Rica.

- **Contreras, D.,** Bhamidipati, S., & Contreras, S. (2016). The Fight of the Wayuu Ethnic Community against the Drought in La Guajira, Colombia. Presentation at the conference: International Disaster Risk Conference (IDRC) Davos 2016. Davos, Suiza.
- **Contreras, D., & Shaw, D. (2016).** Disaster Management and Resilience in Electric Power Systems: The Case of Chile. Presentation at the conference: International Disaster Risk Conference (IDRC) Davos 2016. Davos, Suiza.
- **Contreras, D., & Contreras, S. (2016).** Consequences of the Armed Conflict as a Stressor of Climate Change in Colombia. Presentation at the conference: International Disaster Risk Conference (IDRC) Davos 2016. Davos, Suiza.
- **Contreras, D., (2015).** The Wayuu Genocide: Uribia, La Alta Guajira, Colombia. Presentation at the conference: Disaster by Drought, organised by California Polytechnic State University (CALPOLY). San Luis Obispo, USA.
- **Contreras, D., (2014).** Segregated building use as spatial indicator of the lack of resilience in a recovery process: the case of L'Aquila, Italy. Presentation at Resilience Academy 2014: Livelihoods amidst forced and managed transitions hosted by UNU-EHS, ICCCAD and Munich Re Foundation. Munich, Germany.
- **Contreras, D., (2013).** La Niña Phenomenon in Colombia (2010-2011). Presentation at Resilience Academy 2013: Exploring Livelihood Resilience hosted by UNU-EHS, ICCCAD and Munich Re Foundation. Dhaka, Bangladesh.
- Kienberger, S., **Contreras, D.,** & Zeil, P. (2012). MOVE Project. Presentation at Doctoral College GIScience – University of Salzburg. Salzburg, Austria.
- **Contreras, D.,** Blaschke, T., Kienberger, S., & Zeil, P. (2011). Spatial Vulnerability Indicators: Measuring Recovery Processes After Earthquakes. Paper presented at the 8th International conference on Information systems for crisis response and management, Lisbon, Portugal.
- **Contreras, D., & Stefan, K. (2010).** GIS in the vulnerability assessment and recovery process in a community with elderly and disable people after a disaster. Paper presented at the conference: Rebuilding Sustainable Communities with the Elderly and Disabled People after Disasters, Boston, US.
- <http://www.ucl.ac.uk/drrconference/posters/DContreras.pdf>
- **Contreras, D. (2009)** Designing a spatial planning support system for rapid building damage survey after an earthquake: the case of Bogotá DC, Colombia. Paper presented at the URISA 2009 Annual Conference, Anaheim, California (USA).
- **Contreras, D. (2005).** Amenaza, vulnerabilidad y riesgo presentes en los programas de arquitectura (Translated title: hazard, vulnerability and risk in the academic programs of Architecture). Universidad Central de Venezuela (UCV). Caracas – Venezuela.
- **Contreras, D. (2005).** Amenaza volcánica en Colombia (Translate title: Volcanic Hazards in Colombia). Presentation at the course: Civil protection actions against Natural Hazards; organised by the Directorate General for Civil Defence of the Ministry of the Interior of Spain with the sponsorship of the Spanish Agency for International Cooperation (AECI). La Antigua – Guatemala.
- **Contreras, D. (2004).** Disaster management in Bogotá D.C. - Colombia. Presentation at the conference: Third International Seminar Disasters prevention and mitigation, technologies, management and education, organised by el Instituto Politécnico Nacional (IPN) – Escuela Superior de Ingeniería Mecánica y Eléctrica. México D.F. – México.
- **Contreras, D. (2004).** Planificación urbana: herramienta para la prevención y atención de desastres. (Translated title: Urban planning: tool for disaster prevention and attention). Paper presented at the Jornadas iberoamericanas sobre hábitat, vulnerabilidad y desastres., Santa Cruz de la Sierra, Bolivia.
<http://hdrnet.org/407/1/CONTRERAS.Mojica.04.pdf>

POSTER PRESENTATIONS

- Tiwari, A., **Contreras, D.**, Javed, A., Koduru, T., & Johnston, J. (2024). eMindGuard app: A holistic mental health assessment app integrating social media, environmental and locational data for precision well-being Cardiff Health Research: Successful Together programme, Cardiff, The United Kingdom.
- **Contreras, D.**, Antypas, D., Wilkinson, S., Camacho-Collados, J., Garnier, P., & Cornou, C. (2023). Assessing post-disaster recovery using sentiment analysis: the case of Haiti. SECED 2023, Cambridge, The United Kingdom.
- **Contreras, D.**, & Shaw, D. (2016). Disaster Management and Resilience in Electric Power Systems: The Case of Chile. Poster presented at the conference: International Disaster Risk Conference (IDRC) Davos 2016. Davos, Suiza.
- **Contreras, D.** (2012). Spatial Indicators of Recovery Process after Earthquakes: The case of L'Aquila - Italy. Poster presented at the DK GIScience Symposium 2012, Salzburg, Austria.
- **Contreras, D.**, Zeil, P., & Kienberger, S. (2009). Spatial vulnerability Indicators applied to recovery and risk reduction after earthquakes: The case of L'Aquila - Italy. Poster presented at the Conference: Disaster Risk Reduction for Natural Hazards: Putting Research into Practice London, UK.

Webpage publications

- Contreras, D. (2025, 26th October 2025). Attracting, recruiting, enrolling and retaining female talent in STEM. News and Events Retrieved from <https://research-sites.cardiff.ac.uk/reducing-gender-disparity-in-higher-education/attracting-recruiting-enrolling-and-retaining-female-talent-in-stem/>
 - Contreras, D. (2025, 16th October 2025). International Day of the Girl. News and events. Retrieved from <https://research-sites.cardiff.ac.uk/reducing-gender-disparity-in-higher-education/international-day-of-the-girl/>
 - Contreras, D. (2025, 5th October 2025). International Equal Pay Day: 18th September. News and events. Retrieved from <https://research-sites.cardiff.ac.uk/reducing-gender-disparity-in-higher-education/international-equal-pay-day/>
 - Contreras, D. (2025, 31st August 2025). Women's Equality Day. News and events. Retrieved from <https://research-sites.cardiff.ac.uk/reducing-gender-disparity-in-higher-education/womens-equality-day/>
 - Contreras, D. (2025, 24th August 2025). Women in STEM training session. News and Events Retrieved from <https://research-sites.cardiff.ac.uk/reducing-gender-disparity-in-higher-education/women-in-stem-attraction-enrolment-recruitment-retention-and-employability/>
 - Contreras, D. (2025, 6th July 2025). Congratulations to Women in Engineering !!! News and Events Retrieved from <https://research-sites.cardiff.ac.uk/reducing-gender-disparity-in-higher-education/congratulations-to-women-in-engineering/>
 - Contreras, D. (2025, 21st June 2025). Breaking gender stereotypes since infancy: The Hjalli Model. News and Events Retrieved from <https://research-sites.cardiff.ac.uk/reducing-gender-disparity-in-higher-education/hello-world/>
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KEYNOTE SPEAKER

- **Contreras, D.** (2025). Women and Climate Change: Wayuu Women in La Guajira, Colombia. Keynote speech at the 1st International Conference on Climate Change Action (ICCSUE): Challenges and solutions organised by Salahaddin University-Erbil. Erbil, Iraq – Kurdistan Region. The 8th April 2025.
 - **Contreras, D.** (2020). GIS and the fight against the drought in the Global South. Keynote speech at the Technical University of Kenya (TUK) GIS day 2020. Nairobi, Kenya. The 18th November 2020.
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- **Contreras, D.**, Wilkinson, S., Balan, N., & James, P. (2020). Social Media in Emergency Management and Post-disaster Recovery. The cases of Albania, Zagreb, L'Aquila, Haiti and Chile. Keynote speech at the International Conference on Science in Engineering and Technology (ICoSiET) 2020, Palu, Indonesia. The 21st October 2020.
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MODERATOR

- Lamine, H., Achour, N., & Khankeh, H. (2014, 30th July 2024). International Webinar Launch: Virtual Course on Evaluation of Health Facilities using the Hospital Safety Index (HSIv2) Washington D.C., USA, Pan American Health Organisation (PAHO).
 - Raby, A., Macabuag, J., Wilkinson, S., Adams, K.(2021, 11th October 2021). EEFIT online Evening Lectures: Tsunami and structure damage. The Institution of Structural Engineers (IstructE).
 - Wilkinson, S., Novelli, V., Putrino, V., Whitworth, M., & Lubkowski, Z. (2021, 4th October 2021). EEFIT online Evening Lectures: Building damage assessment and geotechnical problems after earthquakes. The Institution of Structural Engineers (IstructE).
 - Miyamoto, K. (2020, 19th August 2020). Global Earthquake Disasters Reduction, Response and Reconstruction (DRR). Technical Evening Lecture. London, United Kingdom: The Institution of Structural Engineers (IstructE).
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INVITED SPEAKER

- 'Reducing gender disparity in STEM from kindergarten to Professional life'. Presented at the second EMPOWER conference in Cardiff, Wales, UK. The 2nd December 2025.
 - 'Social media and Recovery after Earthquakes'. Presented at the Wyeseide Arts Centre in Builth Wells, Wales, United Kingdom. 24th January 2023.
 - 'The assessment of post-disaster Recovery of Haiti using sentiment and topic analysis'. Presented at the establishment of the Scientific Advisory Board of the Risk Institute Université Grenoble Alpes (UGA). Grenoble, France. The 17th May 2024.
 - 'Ongoing post-disaster recovery assessment analysing social media data'. 2015 Gorkha earthquake. Presented at the workshop on Nepal Earthquake Recovery and Reconstruction organised by EEFIT at London, United Kingdom. 13th September 2022.
 - 'Earthquake reconnaissance using social media and crowdsourcing platforms'. Presented at the Risk Summer School organised by the Risk Institute of Université Grenoble Alpes (UGA). Grenoble, France. 31st August 2022.
 - 'Post-disaster recovery assessment analysing social media data 2015 Gorkha earthquake. Nepal Earthquake Recovery and Reconstruction'. Presented on-line at the International Colloquium on Translational Engineering and Research (ICTER) 2022.Kerala, India. 28th May 2022.
 - 'Ongoing post-disaster recovery assessment analysing social media data. 2015 Gorkha earthquake'. Presented at the workshop on Nepal Earthquake Recovery and Reconstruction. Kathmandu, Nepal. 23rd May 2022.
<https://www.youtube.com/watch?v=OjVOXZYa0R0>
 - 'Earthquake reconnaissance using social media and crowdsourcing platforms'. Presented at the Tools and methods for post-disaster reconnaissance missions, London, United Kingdom, organised by the Universtiy Collegue of London (UCL) on the 20th October 2021.
<https://www.youtube.com/watch?v=myGdkXiECKs>
<https://www.youtube.com/watch?v=7iNdJaC4Kew>
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- 'Social media, GIS and emergency response after earthquakes. The cases of 2020 Zagreb and 2020 Aegean earthquakes'. Presented at Geotalks Series. Cardiff, UK: Cardiff University. 17th November 2021.
<https://www.youtube.com/watch?v=nwQO9FirV0g&t=19s>
 - 'Social Media and Crowdsourcing platforms for Disaster Management'. Presented at Seminar Series – School of Earth and environmental sciences, University of Cardiff. 19th October 2021.
 - 'The role of social media and crowdsourcing platforms for emergency response and post-disaster recovery assessment'. Presentation at the Virtual capacity building workshop on regional spatial data infrastructure (SDI) for ECO countries Islamabad, Pakistan. 13th September 2021.
 - 'El rol de las redes sociales en la respuesta a emergencia y la recuperación post-desastre' (translated title: 'The role of social media in emergency response and post-disaster recovery'). School of Engineering – Universidad de Valparaíso (Chile). 1st July 2021.
 - 'Participatory assessment of climate change impact and coping strategies in La Guajira, Colombia. The case of Camarones, township'. School of Geography – King's College of London (KCL).
 - 'Indicadores Espaciales de la Recuperación después de un Terremoto: (Translated Title: Spatial Indicators of Recovery after Earthquakes)' MundoGEO & UNIGIS.
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SCIENTIFIC & PRACTITIONERS COMMITTEE MEMBER

- **The Earthquake Engineering Field Investigation Team (EEFIT).** Elected Member of the Management Committee (2021 – 2024). The Leader of the sub-committee of training (March 2021 - April 2022). Vice-Chairman (April 2022-October 2023)
 - **Jury member EEFIT Research Grant 2021, 2022 and 2023.**
 - **Jury member Master of Science in Spatial Engineering dissertation.** Guimbatan-Fadgyas, R. (2021). Indigenous Toponyms in Landslide Hazard Mapping for Land Use and Infrastructure Planning. Twente University.
 - **Editor at International Conference on Science in Engineering and Technology (ICoSiet) 2020,** Palu, Indonesia.
 - **Jury member at the 9th i-Rec student competition – IATROGENESIS Disrupting the status quo: Resisting disaster risk creation**
 - **Scientific & Practitioner Committee member at I-REC 2019 Conference.** Disrupting the status quo: Reconstruction, recovery and resisting disaster risk creation.
 - **Jury member for PhD examinations at the Nigel Priestley Seminar 2018**
<https://www.eucentre.it/wp-content/uploads/2018/05/Nigel-Priestley-Seminar-2018.pdf>
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PEER REVIEW OF FUNDING APPLICATION

- Economic and Social Research Council (ESRC) – The United Kingdom Research and Innovation (UKRI): Smart Data Research UK Fellowship. Invitation: the 18th September 2025. Review period: the 1st to 24th October 2025. Online Assessment Panel: 18th November 2025.
 - ESRC - UK. Invitation: The 9th May 2019. Comment submitted on the 24th May 2019
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ORGANISATION OF INTERNATIONAL CONFERENCES

- Panel: 'Disaster Risk Management solutions to mitigate earthquake risk' held by GEM at the Resilient Cities 2017 conference in Bonn (Germany). The 4th to the 6th May 2017.
 - GI-Forum 2013 Salzburg (Austria). The 2nd to the 5th July 2013.
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ORGANISATION OF WORKSHOPS AND TRAINING SESSIONS

- eMindGuard pilot survey at the Discovery Partners Institute (DPI) in Chicago, USA. Organised jointly with Dr Anuj Tiwari. The 9th January 2025. 20 participants.
 - eMindGuard pilot survey at Cardiff University, in Cardiff, UK. Organised jointly with Dr Amir Javed. The 22nd November 2024. 26 Participants.
 - EEFIT. Workshop: Discussing post-disaster practices via ludic activities. The 27th May 2022 at Scott Wilson Nepal (SWN) in Kathmandu, Nepal. This workshop was organised to conclude the 2022 Return Mission to Nepal after the 2015 Gorkha earthquake.
 - Earthquake Engineering Field Investigation Team (EEFIT) training sessions: Mission launch; fieldwork and data management. The 16th, 23rd and 30th November 2021. Trainers (alphabetic order): Professor Alison Raby, Dr Diana Contreras, Dr Josh Macabuag, Dr Valentina Putrino, Dr Viviana Novelli, Dr Sean Wilkinson and Dr Yasemin Aktas. 22 participants (average) per session.
 - Resilience Performance Scorecard with community leaders at La Universidad de Costa Rica. This workshop was organised jointly with the Professor Rolando Castillo. The 16th June 2017 in San Jose, Costa Rica. 34 participants.
 - Resilience Performance Scorecard in with public and private officials La Universidad de Costa Rica. This workshop was organised jointly with the Professor Rolando Castillo. The 15th June 2017 in Jose, Costa Rica. 40 participants.
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PARTICIPATION AS PANELIST

- What role can TNE play in widening access to international education for diverse group? At the Deep Dialogues – The role of transnational education in advancing higher education strategies in the Middle East and North Africa organised by the British Council in Cairo, Egypt from the 20th to the 22nd January 2026.
 - Hard Tremors and Soft Laws in Disastrous Haiti-The Violent Devastation by Goudougoudou 2010. Second discussant in the 36th seminar of the Global South Network (GSN) International Interdisciplinary PhD in Progress Weekly Seminar Series Phase IV Jan-Dec 2025 organised by Dr Nauman Reayat from the University of Leicester. The 10th September 2025. Recorded session available at: https://www.youtube.com/watch?v=3Dol_XfHOFw
 - V Congreso: Sociedad de Análisis de Riesgo Latinoamericana 2021 (SRALA2021). Mesa Redonda: Procesos de reconstrucción en Chile: experiencias y desafíos para las políticas públicas. (Translated title: V Congress: Latin American Risk Analysis Society 2021. Round Table: Reconstruction processes in Chile: experiences and challenges for public policies). The 1st December 2021. Online Conference.
 - How can gender equality, diversity and inclusion support resilience?. Theme: hazard, risk and resilience. University of Twente. ITC 70 years anniversary. The 28th October, 2021. Enchede, The Netherlands.
<https://www.itc.nl/about-itc/centres-of-expertise/centre-for-disaster-resilience/calendar-of-events/new-timeline-stories-folder/opening-of-centre-for-disaster-resilience/>
 - I-REC 2019 Conference in Gainesville, United States of America (USA).
 - How to built-up resilience.2019. Presentation at Colunga Foundation. Santiago, Chile
 - Emergency and disaster management Forum. 2018. Ibague, Colombia.
 - Resilient Cities 2017 Conference in Bonn, Germany.
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SCIENTIFIC AND SOCIETAL IMPACT ACTIVITIES

- Contreras, D. (2019). Interview at BBC Newcastle radio as an expert in climate change to promote the documentary launch: 'Climate Change - The Facts' presented by Sir David Attenborough <https://www.bbc.co.uk/news/av/uk-47972979>
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SHORT COURSES & TRAINING

- **Going Places with Spatial Analysis.** ESRI. From 29th January to 4th March, 2026. Online.
 - **The ArcGIS Imagery MOOC: Foundations and Frontiers.** ESRI. The 22nd October to the 17th December 2025. Online.
 - **Engaging Learners in Large-Group Settings.** Cardiff University. The 25th June 2025. Online course.
 - **In Session Questioning Skills.** Cardiff University. The 19th June 2025. Online course.
 - **Engaging student in virtual classrooms using Mentimeter.** Cardiff University. The 1st May 2025. Online course.
 - **Equitable Practice in Creative and Participatory Research - Method Hackathon.** Cardiff University. The 7th April 2025. Cardiff, UK.
 - **Method Magpie: Experiential methods to bring data to life / Dulliau arbrofol i roi data ar waith.** Cardiff University. The 19th March 2025. Cardiff, UK.
 - **Chair of Research Degree Examination Boards.** Cardiff University. The 7th March 2025. Cardiff, UK.
 - **Writing stories: How fiction writing can be used as a research method.** Cardiff University. The 5th February 2025. Cardiff, UK.
 - **Creative and Innovative Research Methods CoP.** Cardiff University. The 12th December 2024. Cardiff, UK.
 - **Introduction to playful learning and teaching.** Cardiff University. The 6th December 2024. Cardiff, UK.
 - **PSE Internal Examiner Workshop.** Cardiff University. The 14th November 2024. Cardiff, UK.
 - **Partnership and Dialogue. Effectively communicating with students to encourage repeat engagement.** Cardiff University. The 5th November 2024. Online.
 - **How to use Instagram to stand your in your career.** ESRC Workshop. Cardiff, UK.
 - **Blackboard Ultra Tests for Academic and Professional Services Staff.** Cardiff University. The 24th October 2024. Online.
 - **Ignite programme.** Cardiff University. The 17th September, 23rd October, 12th November, 5th December 2023, 14th January, 12th March and 30th April 2024. Cardiff, UK.
 - **Introduction to Research Integrity.** Cardiff University. The 29th August 2024. Online.
 - **Spatial Data Science: The new Frontiers in Analytics.** ESRI. The 28th August to the 12th October 2024. Online.
 - **Digital Productivity and AI in the Workplace.** Cardiff University. The 31st July 2024. Cardiff, UK.
 - **GIS for Climate Action.** ESRI. The 1st May to the 12th June 2024. Online.
 - **Embedding Anti-Racisms for Managers.** Cardiff University. The 1st May 2024. Cardiff, UK.
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- **Cartography.** ESRI. The 3rd April to the 22nd May 2024. Online.
 - **Good practices in Risk and Crisis Communication.** The ROADMAP2 Consortium. The 22nd March 2024. Online.
 - **Introduction to Geotechnology Ethics** (online). March 4th – 29th, 2024.
 - **Responsible Researcher Innovation (RRI) Training.** Cardiff University. The 6th March 2024. Cardiff, UK
 - **GW4: Tackling health inequalities and driving social justice through radical interdisciplinarity.** The 6th, 7th and 23 February, the 8th and 21st March, the 18th, 23rd and 24th April 2024.
 - **Charing University appointing panels.** Cardiff University. The 29th January 2024. Online.
 - **Diversifying Senior Leadership programme.** The 2nd November 2023, the 22nd January, the 2nd and the 23 February 2024. Advance HE.
 - **Personalised support scoping workshop.** Cardiff University. The 11th July 2023. Cardiff, UK.
 - **Skills for recruitment and selection.** Cardiff University. The 28th February 2023. Cardiff, UK.
 - **Delegating effectively.** Cardiff University. The 7th February 2023. Cardiff, UK.
 - **Developing Leaders.** Cardiff University. The 19th and 20th January, the 1st and 24th February and the 15th March, 2023. Cardiff, UK.
 - **Research Integrity Training.** Cardiff University. The 12th October 2022. Online course.
 - **SAP training.** Cardiff University. The 6th April 2022. Cardiff, UK.
 - **Course: Introducing Knowledge Exchange and Impact.** Cardiff University. The 13th January 2022. Online course.
 - **Rubric workshop.** Cardiff University. The 15th December 2021. Online course.
 - **Turnitin.** Cardiff University. The 6th December 2021. Online course.
 - **Unlearning Racism in Geosciences – URGE.** Cardiff University. From the 11th November 2021 to the 6th April 2022. Online course.
 - **Could do better? How to make feedback more effective and engaging.** Cardiff University. The 8th November 2021. Online course.
 - **Accessibility and Digital Education.** Cardiff University. The 8th November 2021. Online course.
 - **An introduction to using Microsoft Whiteboard.** Cardiff University. The 27th October 2021. Online course.
 - **Introduction to Personal Tutoring at Cardiff.** Cardiff University. The 27th October 2021. Online course.
 - **Evidence Based Enhancement. Using student feedback to enact positive change.** The 14th and 28th October 2021. Online course.
 - **Running breakout sessions in Blackboard Collaborate.** The 13th October 2021. Online course.
 - **Learning Central Basics.** Cardiff University. The 11th October 2021. Online course.
 - **Excellence in teaching.** Introduction to Teaching and Supporting Learning. The 28th September 2022. Cardiff University. Cardiff, UK.
 - **Emergency first aid at work.** Skills and knowledge as required under the Health and Safety (First Aid) Regulations 1981 (in accordance with current first aid practice). First and supplies and training (Wales) & the first aid industry body (FAIB). The 30th September 2021. Cardiff, UK
 - **Hosting engaging lessons and meetings using Zoom** (online course). Cardiff University. The 9th August 2021. Online course.
 - **Creating video content in Panopto.** Cardiff University. The 5th August 2021. Online course.
 - **An introduction to using Zoom** (online course). Cardiff University. The 2nd August 2021. Online course.
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- **Crisis management for public officials: Basic skills.** United Nations Institute for Training and Research (UNITAR). From the 12th April – 21st May 2021. Online course.
 - **Nature-based Solutions (NbS) for Disaster and Climate Resilience.** United Nations Environment Programme (UNEP). From the 29th January to the 14th April 2021. Online course.
 - **Human Rights and Migration course.** Zolberg Institute on Migration and Mobility From the 9th September to the 18th November 2020. Zolberg Institute on Migration and Mobility. Online course.
 - **Business Continuity (BCLE 2000).** Disaster Recovery Institute International (DRI) From the 30th April to the 4th May 2018. Alterndorf, Switzerland.
 - **BCI eLearning: Building Resilience Course.** Business Continuity Institute (BCI). From the 28th February to the 28th April 2017. Online course.
 - **Geo-information in Disaster Situation Course.** United Nations Institute for Training and Research (UNITAR). From the 29th February to the 11th March 2016. Geneva, Switzerland.
 - **UN CC: Learn introductory e-course on Climate Change.** United Nations Institute for Training and Research (UNITAR) and The One UN Climate Change Learning Partnership UN CC:Learn. November 2015. Online course.
 - **2nd International Training Workshop on Space Technology for Disaster Mitigation.** Chinese Academy of Science (CAS). From the 3rd to the 13th June 2014. Beijing, China.
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