PERSONAL INFORMATION

NAME: **Arthur Hrast Essenfelder**

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IM: Skype arthur.essenfelder

OTHER: Gender Male | Date of birth 13.03.1987 | Nationality Italian / Brazilian

POSITION

PostDoctoral Researcher

PROFESSIONAL AND ACADEMIC EXPERIENCES

POSITION: Lead Researcher on Performance Assessment of Disaster Risk Reduction Strategies

EMPLOYER: Euro-Mediterranean Centre on Climate Change (CMCC), Risk Assessment and Adaptation Strategies Division (RAAS), Edificio Porta dell'Innovazione - 2nd Floor, Via della Libertà, 12, 30175 Marghera-Venice (VE), Italy

BUSINESS OR SECTOR: Research Institute

DATES (FROM – TO): Apr. 2017 – Present date

MAIN ACTIVITIES AND RESPONSIBILITIES:

- Development of an innovative socio-hydrologic/hydro-economic model to support decision-making in complex human-water systems (EIT Climate KIC funded project);
- Development of a DEM-based, rapid flood inundation model to characterise coastal flood hazards and risks (partially sponsored by the European Union Humanitarian Aid and Civil Protection under the SAVEMEDCOASTS project);
- Application of 2D Hydrodynamic spatial-modelling tools for the characterisation of flood hazard and assessment of flood risks in coastal and river areas in urban environments (partially funded by Climate-KIC under the SAFERPLACES project);
- Development and enhancement of an innovative flood risk climate service based upon the Copernicus Climate Change Services (C3S) as part of the CLARA project (funded by the EU under the Horizon 2020 Program).
- Utilisation of the eco-hydrologic model SWAT and machine learning techniques to evaluate socio-economic agents' behavioural changes in the context of policy-induced and autonomous adaptation actions in coupled agricultural-hydrological systems (funded by the European Topic Centre on Climate Change Impacts, Vulnerability and Adaptation EEA/ACC/13/002-ETC/CCA project);

POSITION: Adjunct Professor

EMPLOYER: Ca' Foscari University of Venice, Department of Environmental Sciences, Informatics and Statistics, Scientific Campus, Via Torino 155, 30172 Mestre-Venice, Italy

BUSINESS OR SECTOR: University

DATES (FROM – TO): Sep. 2018 – Present date

MAIN ACTIVITIES AND RESPONSIBILITIES:

Teaching activity for the following courses:

- Ph.D. in Science and Management of Climate Change: Course: Climate Risk Modelling and Assessment [PHD102].
- Ph.D. in Science and Management of Climate Change: Course: Methods and Tools for the Analysis of Climate Change Impacts and Policies [PHD028].

Topics covered during lessons:

- Utilisation of R and QGIS for spatial hazard characterisation and risk assessment;
- Introduction to the ECMWF's Climate Data Store API and Toolbox;
- Introduction to Extreme Value Theory;
- Utilisation of the 2D Hydrodynamic model ANUGA for flood hazard characterisation;
- Using R for handling NetCDF data and calculating extreme climate indices;
- Introduction to Climate Data Operators (CDO);
- R for Data Science.

POSITION: Expert on Quantitative Methods for Climate Change (PHD021)
EMPLOYER: Ca' Foscari University of Venice, Fondamenta San Giobbe, Cannaregio 873, 30123 Venice, Italy
BUSINESS OR SECTOR: University
DATES (FROM – TO): Jun. 2017 – Aug. 2018
MAIN ACTIVITIES AND RESPONSIBILITIES:
- Provide assistance to students of the Ph.D. (D.M.45) in Science in Management of Climate Change, Ca' Foscari University of Venice (Italy), on topics pertaining to the program of the lectures on *"Quantitative Methods for Climate Change"* and *"Decision Theory and Multi-Criteria Analysis";*
- Ministered a seminar series entitled *"A Short Introduction to R: Building the Foundations to Real Life Applications"*;
- Assignment of hands-on exercises as part of students performances' grading.

POSITION: Ph.D. Student
EMPLOYER: Fondazione Eni Enrico Mattei – FEEM, Isola di San Giorgio Maggiore, 8, 30124, Venice, Italy
BUSINESS OR SECTOR: Research Institute
DATES (FROM – TO): Dec. 2016 – Mar. 2017
MAIN ACTIVITIES AND RESPONSIBILITIES:
- Collection and consolidation of hydrologic and socio-economic data for eco-hydrologic (SWAT model) and microeconomic (Positive Multi-Attribute Programming model) connections and feedbacks analysis (SWITCH-ON Project);
- Hydrologic and economic data management for the evaluation of alternative adaptation measures and nature-based solutions in river basins (GREEN Project).

POSITION: Visiting Ph.D. Student
EMPLOYER: Institute for Soil Science and Site Ecology, Technische Universität Dresden, Department of Forest Sciences, Pienner Straße 19, 01737 Tharandt, Germany
BUSINESS OR SECTOR: Research Institute
DATES (FROM – TO): Mar. 2015 – Nov. 2015
MAIN ACTIVITIES AND RESPONSIBILITIES:
- SWAT model set-up and calibration;
- Flood protection through retention and detention basins with managed soils;
- Modelling and assessment of water and nutrient balances in river basins.

POSITION: Environmental Engineer Trainee
EMPLOYER: IDP – Inversiones, Desarrollos y Proyectos, Glorieta Fernando Quiñones s/n, Edificio Centris, planta 1ª, módulo 3. 41940, Tomares Sevilla, Spain
BUSINESS OR SECTOR: Engineering – Energetic Efficiency Department
DATES (FROM – TO): Jan. 2013 – Jun. 2013
MAIN ACTIVITIES AND RESPONSIBILITIES:
- Development of studies and reports of energy saving/efficiency and renewable energies;
- Energy billing, buildings and street-lights energy audits;
- System monitoring and parameters optimisation;
- Development of a Visual Basic software to support the decision making of possible improvements of public lighting equipment.

POSITION: Junior Environmental Analyst
EMPLOYER: Votorantim Cimentos S.A., Rodovia PR-092, Nr 1.303, Curitiba-PR, Brazil
BUSINESS OR SECTOR: Cement Industry – Supply Chain
DATES (FROM – TO): Apr. 2011 – May 2012
MAIN ACTIVITIES AND RESPONSIBILITIES:
- Sales management of the environmental liabilities (scraps) and obsolete materials (storable) originated from the production process from the operational branches;
- Training and coordination of a group of 16 people on the operational and management practices for Inventory and Environmental Liabilities Management and Storage;
- Development and maintenance of the Corporate Guides for Inventory and Environmental Liabilities Management and Storage;
- Stock and sales control of the environmental liabilities and obsolete materials;
- Operational support to the branches;
- Development of automated Excel spreadsheets and Access routines linked with the corporate database (SAP R/3).

POSITION: Process Analyst Intern, later promoted to Junior Process Analyst
EMPLOYER: Esso Brasileira de Petróleo Ltda, Rod Br 476, km 16, Araucária - PR, Brazil

BUSINESS OR SECTOR: Oil Industry – Supply Chain & Distribution
DATES (FROM – TO): Feb. 2009 – Mar. 2011
MAIN ACTIVITIES AND RESPONSIBILITIES:
- Review and update of the Solid Waste Management Plan (SWMP) and the Corporate Environmental Management System (EMS) for the Araucária-PR branch;
- Operational and technical support to the branches of Brazil-South region;
- Development of a software in VB.NET to control the transit of tank wagons and to support decision-making of future daily transfers.

POSITION: Undergraduate Researcher
EMPLOYER: Instituto de Tecnologia para o Desenvolvimento – LACTEC, CEHPAR (Prof. Parigot de Souza Centre for Hydraulics and Hydrology), BR-116 - KM 98 - Nº 8813 – UFPR Polytechnic Centre, Curitiba-PR, Brazil

BUSINESS OR SECTOR: Research Institute
DATES (FROM – TO): Nov. 2008 – Feb. 2009
MAIN ACTIVITIES AND RESPONSIBILITIES:
- Development of technical reports and monitoring of the water quality of reservoirs belonging to the COPEL company;
- Development of automated spreadsheets (VBA) to optimise the calculation of reservoirs' water quality indicators;
- Creation of water quality geo-referenced thematic maps using ArcGIS.

POSITION: Undergraduate Researcher
EMPLOYER: Department of Environmental Engineering, GEANEX (Group of Advanced Studies in Energy and Thermoeconomics for the Sustainable Development), Federal University of Paraná – UFPR, UFPR Polytechnic Centre, Curitiba-PR, Brazil

BUSINESS OR SECTOR: Research Institute
DATES (FROM – TO): Mar. 2008 – Aug. 2008
MAIN ACTIVITIES AND RESPONSIBILITIES:
- Investigation of the possible causes resulting in an excessive emission of CO gas from food production lines of a private company;
- Development of a pilot catalytic converter to control and reduce the excessive CO emission.

POSITION: Environmental Analyst Intern
EMPLOYER: Cavo Gestão Ambiental S/A, Rua João Negrão,1.517, Curitiba-PR, Brazil

BUSINESS OR SECTOR: Environmental Services Industry
DATES (FROM – TO): Oct. 2007 – Mar. 2008
MAIN ACTIVITIES AND RESPONSIBILITIES:
- Monitoring the production of waste generation by public and private clients;
- Development of automated spreadsheets (VBA) to optimise the calculation of waste generation by client.

OTHER PROFESSIONAL AND ACADEMIC EXPERIENCES

- Adjunct Professor at Ca'Foscari University of Venice for the course "*Decision Theory and Multi-Criteria Analysis*", 30 hours teaching at the Ph.D. and M.Sc. levels (Bando Decreti - DAIS N. 1210/2020 Prot. n. 0062828, 30/10/2020).
- Adjunct Professor at Ca'Foscari University of Venice for the course "*Climate Damage Modelling and Assessment*", 10 hours teaching at the Ph.D. and M.Sc. levels (Bando Decreti - DAIS N. 1211/2020 Prot. n. 0062829, 30/10/2020).
- Adjunct Professor at Ca'Foscari University of Venice for the course "Review of Calculus", 30 hours teaching at the B.Sc. level (Bando Decreti - DAIS N. 719/2020 Prot. n. 0037676, 21/07/2020).
- Invited lecturer covering the subject "*The Importance of Considering Individuals' Behavioural Preferences in Complex Human-Water Systems*" (2020) for the Ph.D. in Science in Management of Climate Change, Ca' Foscari University of Venice (Italy), as part of the program of the courses on "Adaptive Management of Natural Resources and Agricultural Systems" ministered by Prof. Carlo Giupponi.
- Adjunct Professor at Ca'Foscari University of Venice for the course "*Climate Risk Modelling and Assessment*", 10 hours teaching at the Ph.D. and M.Sc. levels (Bando Decreti - DAIS N. 1287/2019 Prot. n. 0064736, 31/10/2019).
- Adjunct Professor at Ca'Foscari University of Venice for the course "*Methods and Tools for the Analysis of Climate Change Impacts and Policies*", 10 hours teaching at the Ph.D. and M.Sc. levels (Bando Decreti - DAIS-VICCS 470/2018 Prot. 32928, 07/06/2018).
- Invited lecturer covering the subject "*A Brief Introduction to QGIS*" for the Ph.D. in Science in Management of Climate Change, Ca' Foscari University of Venice (Italy), as part of the program of the courses on "Methods and Tools for the Analysis of Climate Change Impacts and Policies" (2018) ministered by Dr. Jaroslav Mysiak.
- Responsible for organising and teaching the "*R for Data Science: An Introduction to the Capabilities of R*" (2018) course series at the Euro-Mediterranean Centre for Climate Change (CMCC) Foundation.
- Invited speaker covering the subject "*The Importance of Considering Individuals' Behavioural Preferences in Complex Human-Water Systems*" (2017) for the Water Future: Working Group Presentation Series.
- Invited speaker covering the subject "*The Importance of Considering Individuals' Behavioural Preferences in Complex Human-Water Systems*" (2017) for the Water Future: Working Group Presentation Series.
- Invited lecturer covering the subject "*A Short Introduction to R: Building the Foundations to Real Life Applications*" (2017) for the Ph.D. in Science in Management of Climate Change, Ca' Foscari University of Venice (Italy), as part of the program of the courses on "Quantitative Methods for Climate Change" and "Decision Theory and Multi-Criteria Analysis", both ministered by Prof. Silvio Giove.
- Invited lecturer covering the subject "*Rationalising Systems Analysis for the Evaluation of Adaptation Strategies in Complex Human-Water Systems*" (2017) for the Ph.D. in Science in Management of Climate Change, Ca' Foscari University of Venice (Italy), as part of the program of the courses on "Adaptive Management of Natural Resources and Agricultural Systems" ministered by Prof. Carlo Giupponi.
- Invited lecturer covering the subject "*Applications of Artificial Neural Networks Models in Environmental Systems*" (2016) for the Ph.D. in Science and Management of Climate Change, Ca' Foscari University of Venice (Italy), as part of the program of the course on "Quantitative Methods for Climate Change" ministered by Prof. Silvio Giove.
- Invited lecturer covering the subject "*Evaluating Climate Change Effects Over Two Contrasting Watersheds*" for the M.Sc. in Environmental Science, Ca' Foscari University of Venice (Italy), as part of the program of the course on "Environmental Modelling" (2016) ministered by Prof. Roberto Pastres.

Education and Training

Title: Ph.D. in Science and Management of Climate Change

Ca' Foscari University of Venice (Italy), Department of Economics

Dates (from – to): 2014 - 2017

Main subjects covered:

- Environmental economics;
- Climate change and natural resources management;
- Methods and tools for the analysis of climate change impacts and policies;
- Analysis and modelling of uncertainty.

Thesis title: *"Climate Change & Watershed Planning: Understanding Related Impacts and Risks"*
Supervisor: Prof. Dr. Carlo Giupponi | Co-Supervisor: Prof. Dr. Silvio Giove

Title: Specialisation in Environmental Science and Sustainable Development

Fundação Getúlio Vargas – FGV/RJ (Brazil), Department of Environmental Science

Dates (from – to): 2010 – 2011

Main subjects covered:

- Environmental management and sustainable development;
- Corporate instruments for Environmental Management;
- Environmental policy instruments;
- Socio-environmental responsibility.

Supervisor: Prof. Claudio Cesar Ramalho Giolitto
Grade: 7.9/10.0

Title: B.Sc. Degree in Environmental Engineering

Federal University of Paraná – UFPR (Brazil), Department of Environmental Engineering

Dates (from – to): 2005 – 2010

Main subjects covered:

- Principles and applications of environmental modelling;
- Environmental pollutants dispersion and treatment;
- GIS applied in environmental science;
- Environmental impact assessment;

Monograph title: *"Short-term Forecast of a River Flow using Artificial Neural Networks"*
Supervisor: Prof. Dr. Ricardo Carvalho de Almeida
Grade: 96.0/100.0

Personal Skills

Mother Tongue(s): Portuguese

Other Languages:

	Understanding		Speaking	
	Listening	Reading	Spoken Interaction	Spoken Production
English	C2	C2	C2	C2
Italian	C2	C2	C2	C2
Spanish	B2	B2	B1	B1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Computer Skills:

	Competence Level		
	Basic User	Independent User	Proficient User
Office Software	-	-	LibreOffice Microsoft Office
GIS Software	SAGA GIS	GRASS 7	ArcGIS QGIS
IDE Software	Code::Blocks Qt Creator	MATLAB Editor Microsoft Visual Studio	RStudio PyCharm
Programming Languages	SQL	C++ Python	R Fortran VB.NET and VBA
Modelling Tools	HEC-RAS TensorFlow (Python) Keras (Python)	InVEST MATLAB: NNet Toolbox ANUGA	SWAT Model

Affiliations/Memberships

2015: Member of the Society for Decision Making Under Deep Uncertainty – DMUU

2016: Member of the International Environmental Modelling & Software Society – iEMSs

2018: American Geophysical Union – AGU

2020: American Geophysical Union – EGU

Selected Publications

Essenfelder, A. H.; Larosa, F.; Mazzoli, P.; Bagli, S.; Broccoli, D.; Luzzi, V.; Mysiak, J.; Mercogliano, P.; dalla Valle, F. "Smart Climate Hydropower Tool : A Machine-Learning Seasonal Forecasting Climate Service to Support Cost – Benefit Analysis of Reservoir Management," Atmosphere (Basel)., vol. 11, no. 1305, pp. 1–21, 2020.

Essenfelder, A. H.; Giupponi, C. (2020). A Coupled Hydrologic-Machine Learning Modelling Framework to Support Hydrologic Modelling in River Basins under Interbasin Water Transfer Regimes. Environ. Model. Softw., vol. 131, no. March, p. 104779, 2020.

Pérez-Blanco, C. D.; **Essenfelder, A. H.**; and Perry, C. "Irrigation Technology and Water Conservation: A Review of the Theory and Evidence," Rev. Environ. Econ. Policy, vol. 14, no. 2, pp. 216–239, 2020.

Samela, C., Persiano, S., Bagli, S., Luzzi, V., Mazzoli, P., Reithofer, A., **Essenfelder, A. H.**, Amadio, M., Mysiak, J. (2020). Safer_RAIN: A DEM-Based Hierarchical Filling-&- Spilling Algorithm for Pluvial Flood Hazard Assessment and Mapping across Large Urban Areas. Water, 12(1514).

Pérez-Blanco, C. D.; **Essenfelder, A. H.**; and Gutiérrez-Martín, C. (2020). A tale of two rivers: integrated hydro-economic modeling for the evaluation of trading opportunities and return flow externalities in inter-basin agricultural water markets. Accepted for publication. Journal of Hydrology.

Marzi, S., Mysiak, J., **Essenfelder, A. H.**, Amadio, M., Giove, S., & Fekete, A. (2019). Constructing a comprehensive disaster resilience index: The case of Italy. Plos One, 14(9), e0221585. https://doi.org/10.1371/journal.pone.0221585

Amadio, M., Rita Scorzini, A., Carisi, F., **Essenfelder, A. H.**, Domeneghetti, A., Mysiak, J., & Castellarin, A. (2019). Testing empirical and synthetic flood damage models: The case of Italy. Natural Hazards and Earth System Sciences, 19(3), 661–678. https://doi.org/10.5194/nhess-19-661-2019

Essenfelder, A. H., Dionisio Pérez□Blanco, C., Mayer, A. S. (2018). Rationalizing Systems Analysis for the Evaluation of Adaptation Strategies in Complex Human□Water Systems. Earth's Future, 6. https://doi.org/10.1029/2018EF000826

Essenfelder, A. H. (2017), *"Climate Change and Watershed Planning: Understanding the Related Impacts and Risks"*, available at the Ca' Foscari University of Venice Bibliography Database, Ph.D. Thesis, Department of Economics, Ca' Foscari University of Venice.

Essenfelder, A. H.; Giove, S.; and Giupponi, C. (2016), *"Identifying the Factors Influencing the Total External Hydraulic Loads to the Dese-Zero Watershed"* in 8th International Congress on Environmental Modelling and Software, 2016, vol. 3, pp. 731–738.

Essenfelder, A. H. (2016). *SWAT Weather Database: A Quick Guide*. Version: v.0.16.07. DOI: 10.13140/RG.2.1.4329.1927.

Essenfelder, A. H. (2009), *Previsão de Curto Prazo da Vazão de um Rio Utilizando Redes Neurais Artificiais (Short-term Forecast of a River Flow using Artificial Neural Networks)*, Federal University of Paraná – UFPR Bibliography Database, Monograph, Department of Environmental Engineering, Federal University of Paraná – UFPR.

de Miranda, T. L. G.; Brassac, N. M.; Prestes, E. C.; Accionlly, A.; Malinowski, A.; Campos, J. C.; Zandoná, D. F.; Martins, M. A. R.; Hainosz, F. S. H.; da Silva, J. M.; da Silva, J. R. T.; Simoni, C. A.; Rozales, D. M.; Urben Filho, A.; Bianconi, G. V.; de Souza, G. A.; Conte, C. E.; Bastos, L.; Iantas, R.; Domingues, K., C.; Viana, M. S.; Cardon, E. B.; **Essenfelder, A. H.** (2008). *Plano Ambiental de Conservação e Uso do Entorno de Reservatório Artificial: UHE Governador Ney Aminthas de Barros Braga - Atualização*. Vol. 1. LACTEC – Instituto de Tecnologia para o Desenvolvimento. Curitiba-PR, Brazil.

Essenfelder, A. H.; Errera, M. R.; Marin, C. A. (2008) . *Modelagem de um Sistema de Dois Reatores Anaeróbios Acoplados para Produção de Gás Hidrogênio e Metano*. In: Evento de Extensão e Cultura da UFPR, 2008, Curitiba-PR, Brazil. N° BANPESQ/THALES: 2002.01.2081.

ADDITIONAL INFORMATION

EVENTS, SEMINARS AND WORKSHOPS

2020 – ""*Smart Climate Hydropower Tool: A web-cloud-based climate service for supporting decision-making in hydropower production - iEMSs2020 session A.0"*. 10th International Congress on Environmental Modelling and Software. Brussels, Belgium

2020 – *"European Geophysical Union General Assembly 2020"*. European Geophysical Union – EGU. Online format Sharing Geoscience Online, 4– 8 May 2020.

2019 – *"System-Risk - a large-scale systems approach to flood risk assessment and management."*. Helmholtz Centre Potsdam - GFZ German Research Centre for Geosciences, 17–19 September 2019, Potsdam, Germany.

2019 – *"4th European Climate Change Adaptation conference"*. ECCA 2019, CCB, Lisbon, 28–31 May, Portugal.

2018 – *"2018 American Geophysical Union Fall Meeting"*. American Geophysical Union – AGU. Washingtion, US.

2018 – *"2018 American Geophysical Union Fall Meeting"*. American Geophysical Union – AGU. Washingtion, US.

2018 – *"Workshop: Hydrological Services for Business"*. European Centre for Medium-Range Weather Forecasts – ECMWF. Reading, UK.

2018 – *"Itallian Association of Environmental and Resource e Economists- IAERE – Sixth Annual Conference"*. University of Turin, Department o f Economics and Statistics "Cognetti de Martiis", Turin, Italy.

2017 – *"Efficiency-Oriented Water Management: From Panaceas to Actual Solutions"*. Euro-Mediterranean Centre on Climate Change (CMCC), Risk Assessment and Adaptation Strategies Division (RAAS). Venice, Italy.

2017 – *"SWAT 2017 International Conference"*. Texas A&M AgriLife Research, United States Department of Agriculture (USDA), Agricultural Research Service (ARS), and Warsaw University of Life Sciences (SGGW) Water Centre. Warsaw, Poland.

2016* – *"Workshop A3 – Long-Term Analysis of Socio-Ecosystems under Climate Change: New Avenues for Integrated Modelling of Adaptation Processes"*. 8th International Congress on Environmental Modelling and Software. Toulouse, France
*Part of the organisation team for the workshop.

2015 – *"SWAT 2015 International Conference"*. Texas A&M AgriLife Research, United States Department of Agriculture (USDA), Agricultural Research Service (ARS), and Center for Advanced Studies, Research and Development in Sardinia (CRS4). Santa Margherita di Pula, Italy.

2015* – "*Summer School in Land Use and the Vulnerability of Socio-Ecosystems to Climate Change: Remote Sensing and Modelling Techniques"*. Ca' Foscari University of Venice, Venice Centre for Climate Studies – VICCS, PhD Programme in Science and Management of Climate Change, and the Ca'Foscari Summer School. Venice, Italy
*Part of the organisation team for workshop and summer school activities.

2015 – *"Nexus Seminar No. 5 - The Importance of Nexus Tools for integrated Management of Water, Soil and Waste"*. UNU-FLORES and TU Dresden. Dresden, Germany

2015 – *"Nexus Seminar No. 4 - Improved Environmental Management needs Postgraduate Training Cipsem and partners"*. UNU-FLORES and TU Dresden. Dresden, Germany

2015 – *"Nexus Seminar No. 3 - Impact of Soil Conservation Measures on the Water Supply in the Dryland of China"*. UNU-FLORES and TU Dresden. Dresden, Germany

2014 – *"Sustainability Science – Summer School"*. Harvard University, Venice International University and Italian Ministry of Environment, Venice, Italy

2014 – *"Climate Policies - Mitigation and Adaptation – Seminar"*. Ca' Foscari University of Venice and Durham University, Venice, Italy

2014 – *"Moving Towards a Low Carbon Economy - Green Growth vs. Sustainable – Seminar"*. Ca' Foscari University of Venice and European Economic and Social Committee. Venice, Italy

2011 – *"First Symposium for the Presentations of the Graduation Projects of the Environmental Engineering Course – Symposium"*. Federal University of Paraná, Curitiba-PR, Brazil

2008 – *"16th Scientific Initiation Event – EVINCI"*. Federal University of Paraná, Curitiba-PR, Brazil

Grants

- Science Without Borders – Full-Time PhD – Implemented in 2014.
  Granted a 3 year full-time PhD scholarship by CAPES Foundation (Brazil) to attend the PhD in Science and Management of Climate Change, Ca' Foscari University of Venice.
- Programma Leonardo da Vinci – 2013.
  Granted a six months scholarship to take part in the Italian Exchange Program *"Progetto Edilizia Sostenibile in Europa (ESE)"*

Research Projects

- 2019 – 2021: *Copernicus Climate Change Service, Sectoral Information System to Support Disaster Risk Reduction* (**C3S-DRR**). Contract Notice: 2018/S 145-333322. Budget: between 800.000,00 and 1.000.000,00 EUR.
- 2019 – 2023: *REmote Climate Effects and their Impact on European sustainability, Policy and Trade* (**RECEIPT**). Funding programme: European Commission H2020. Role: Scientific and technical support. Budget: 6.998.996,25 EUR.
- 2018 – 2021: *Improved assessment of pluvial, fluvial and coastal flood hazards and risks in European cities as a mean to build safer and resilient communities* (**SAFERPLACES**). Funding programme: Climate-KIC. Role: Scientific Co-Leader of the WP3 (DAMAGE), contributor to WP2 (HAZARD), WP4 (OPPORTUNITIES), and WP5 (EXPLOIT). Budget: 1.799.953,86 EUR for a total of 36 months.
- 2017–2020: *Climate forecast enabled knowledge services* (**CLARA**). Funding programme: European Commission (Horizon 2020). Role: Developer of the climate service "Economic Assessment of Flood Risk "FLOODMAGE; scientific contributor to the climate service "Smart Climate Hydropower Tool" SCHT. Budget: Approx. 2.000.000,00 EUR for 3 years.
- 2017–2018: *Sea level rise scenarios along the Mediterranean coast* (**SAVEMEDCOAST**). Funding programme: Funded by the European Union Humanitarian Aid and Civil Protection. Agreement Number: ECHO/SUB/2016/742473/PREV16. Role: Scientific contribution on the deliverable E.4. Assessment Report of economic impacts of coastal flood risk and sea level rise scenarios. Budget: 672.385,00 EUR for 24 months.
- 2014–2018: *European Topic Centre on Climate Change impacts, vulnerability and Adaptation* (**ETC-CCA**). Funding Programme: EEA - European Environment Agency. Role: Scientific researcher on adaptation strategies for extreme weather events. Budget: 3.031.647,50 EUR for 5 years duration.
- 2017–2018: *Green Infrastructures for disaster risk reduction protection: evidence, policy instruments and marketability* (**GREEN**). Funding Programme: G.A. ECHO/SUB/2016/740172/PREV18. Role: Scientific researcher. Budget: 681.153,00 EUR for 24 months.
- 2016–2017: *Service for local and economy wide assessment of adaptation actions in agriculture* (**AGRO ADAPT**). Funding Programme: CSAb - Climate KIC. Role: Leading researcher for the development of the coupling framework between the hydrologic and microeconomic models. Budget: 186.000,00 EUR for 15 months.
- 2013–2017: *Sharing Water-related Information to Tackle CHanges in the Hydrosphere – for Operational Needs* (**SWITCH-ON**). Funding Programme: European Union's Seventh Programme for research, technological development and demonstration under grant agreement No 603587. Role: Scientific researcher. Budget: Approx. 7.800.000,00 EUR over 4 years.

Other Information

Il sottoscritto dichiara di essere informato, ai sensi del d.lgs. n.196/2003, che i dati personali raccolti saranno trattati anche con strumenti informatici esclusivamente nell'ambito del procedimento per il quale la presente dichiarazione viene resa e per tutti gli adempimenti connessi.