Claudio Ribotta







OATO - Italian Register of Architects: --- | VAT: --- Nationality Italian

Landscape architect specialised in geospatial technologies and wildfire research. I have always been interested in data management, natural hazards, project management, human behaviour, and sustainable development.

EMPLOYMENT

September 2023- present

Geographic Information System consultant

TerreLogiche s.r.l.

Consultant for QGIS plugins development, geodatabase (RDBMS), webGIS development and geospatial DMS (data management systems). Python and PyQgis programming and development of QGIS-based solutions for third parties. Designer and trainer in PyQgis courses tailored to specific business/institution needs.

WFP - World Food Program of the United Nations - Rome HQ, Italy

Consultancy assignment as GIS specialist of the Food Security Information Network, acting as the focal point for all the geospatial information needed by the FSIN team. Data management and analysis. Backstopping and capacity development for GIS experts from other Institutions and local networks.

May 2019- present

Freelance consultant on wildfire risk management

Freelance landscape architect

2021 May. Practitioner in charge of the "2021-2025 Forest Fire Plan of the Castelli Romani Regional Park" commissioned by the Managing Authority of the Castelli Romani Park, Province of Rome. I coordinated the technical and park ranger teams that contributed to the plan. I edited the final report, cartography, and geospatial datasets collection for the Park's decision support systems.

2020 June. Accountable for the "Supplementary Documentation to the 2019 - 2021 Forest Fire Plan of the Castelli Romani Regional Park" commissioned by the Park's Managing Authority. Using the FlamMap software, I modelled fire behaviour in the Park's Natura 2000 sites.

February 2022 – August 2023

ITN Pyrolife - Early Stage Researcher

 ${\sf INRAE} \quad \text{-} \ {\sf National} \ {\sf Research} \ {\sf Institute} \ {\sf for} \ {\sf Agriculture} \ {\sf and} \ {\sf Environment} - {\sf Aix-en-Provence-France}$

In the framework of the Innovative Training Network *PyroLife*, funded by the MSCA within the European Horizon2020 program, I worked with the RECOVER unit on integrated fire management, studying defensible spaces and mitigation measures in the Wildland-Urban Interface (WUI), focusing on geospatial tools and datasets to address efforts in WUI's fire-risk reduction. The research title was "How to mitigate fire propagation in Wildland-Urban Interface vegetation and impact on building".

FAO - Food and Agriculture Organization of the United Nations - Rome - Italy

I was seconded from December 2022 to July 2023 for a fellowship at the Forestry Division of FAO. I worked with the Fire Management Officer of the Climate and Resilience Team to assess the impacts of wildfires affecting human settlements at the global level. I developed a Python code for QGIS to automatically assess human and livelihoods exposure to fires.

July 2020 – July 2022

Wildfires research fellow

University of Sassari – Departement of Agriculture, Italy

As part of the team accountable for the Interreg Italy-France Maritime Program 2014-2020 "MED-Star-Strategies and measures for the fire risk mitigation in the Mediterranean area", I was responsible for the task "Analysis of the fire causes and regime in the Mediterranean region". I worked mainly with EU Copernicus geodata and French databases such as INSEE and Promethée.

I worked for the Interreg Italy-France Maritime Program 2014-2020 "INTERMED - Interventions to manage and reduce risk of wildfire in the wildland-urban interface" project, dealing with requests for ESA TPM hi-res satellite data and their geospatial processing. I was responsible for the deliverables of the task in charge of my team.

In the "ECF-G20- Impacts and climate risks expected for G20 Countries" project, funded by the European Climate Foundation, I collaborated with the Mediterranean Centre for Climate Change (CMCC) to project future wildfire impacts in different climate change scenarios. My task was to produce the simulations' maps for the final report.

I worked on new proposal development for the European Horizon H2020 funding program, focusing on airborne geospatial technologies applied to fire management and fire science.

January 2018 – December 2020

Freelance consultant in construction project management

3BA Engineering / Consulting S.r.l. Eagleprojects S.r.l.

I worked in the Project Management Office of the engineering department of companies entrusted with implementing the optical fiber networks within the public Ultra Broadband Strategic Plan framework. I was involved in project and construction site management, mainly automating map production and field surveys using the QField application.

GEOGRAPHIC INFORMATION SYSTEMS AND DIGITAL SKILLS

I started working with maps and GIS technologies more than ten years ago, during my master's degree. Since then, all my jobs have been related to GIS and geospatial data, whether collected in the field or downloaded from remote sensing datasets.

GIS: I specialised in the open-source **OSGeo QGIS software** and the mobile application **QField**. I can automate the data processing and integrate QGIS workflows with other software such as **FLAMMAP**, **R**, **GEE** and ESA **SNAP** software. I have good knowledge of remote sensing data types and sources. My geospatial skills include:

- Python, PyQGIS and QGIS plugin development
- Optical remote sensing and SAR interferometry
- Geodatabase, RDBMS, PostgreSQL and PostGIS
- WebGIS development and DMS applications

Recently, I successfully attended the FAO "Forest and land monitoring for climate action- SEPAL" full course about

the System for Earth Observation Data Access, Processing and Analysis for Land Monitoring (FAO SEPAL) geospatial platform to obtain mosaics, composites, time-series and change detection maps.

To improve and certify my skills, I attended a set of advanced training courses on geographic information systems provided by TerreLogiche S.r.l., an ISO9001:2015 E37-certified training organization.

CODING: Advanced knowledge of **Python** for QGIS applications and statistics **software R**. Ability to use JavaScript for Google Earth Engine. Good understanding of data prediction and **machine learning** techniques in R and Python languages.

COMPLEMENTARY: Proficiency with topography survey tools (GPS). Good knowledge of aerial photogrammetric surveys and 3D point cloud workflows (UAS flights, Metashape). Proficiency in Microsoft Office's main tools (Word, Excel, PowerPoint). Good knowledge of graphics tools such as Adobe Creative Suite (Photoshop, Illustrator, InDesign) and design tools such as Autodesk AutoCAD. Basic understanding of BIM application (Autodesk Civil 3D).

EDUCATION

EUROPEAN QUALIFICATIONS FRAMEWORK (EQF) LEVEL 8

2023 January – 2023 May

Postgraduate Specialization – Proposal design and EU-funded projects management

Postgraduate course | Tor Vergata University of Rome - School of Economics - Department of Management and Law

2019 March - 2019 September

Postgraduate Specialization - Landscape administration and law

 $\label{eq:postgraduate} Postgraduate \ course - 10 \ ECTS \ | \ University \ of \ Padova - Department \ of \ Public, \ International \ and \ European \ Law \ (DiPIC)$

2018 March - 2019 May

Postgraduate Specialization Master – Wildfire planning, risk management and fight

Second level university master (Italian classification: Master di II livello) – 60 ECTS – EQF level 8

Link Campus University – Rome

Highest marks, graduated cum laude

Thesis: "Geospatial analysis as DSS to optimize wildfire prevention projects' impacts in the wildland-urban interface (WUI) areas".

2017 December 18

Inter-athenaeum Master's Degree-Landscape architecture and green areas

Italian master degree classification LM-3 Landscape architecture -120 ECTS - EQF level 7

University of Genova – Department of Architectural Science (DSA) | University of Torino - Department of Agriculture and Forestry (DISAFA) | University of Milano – Department of Agriculture and Environmental Sciences (DISAA) | Polytechnic University of Torino - Department of Land Sciences, Design and Policies (DIST)

Highest marks, graduated cum laude.

The study program included botany, geo-botany, ecology, applied ecology, design of the urban environment, green infrastructures, and urban regeneration.

Internship at Urban Design Sector, Infrastructure and Mobility Department, Municipality of Turin.

Thesis: "Mediation landscapes. Lucento neighbourhood's case in Turin". The thesis developed a project for the urban and ecological regeneration of the ex-ThyssenKrupp industrial area in Turin.

Reading

2012 December 19 Bachelor's Degree- Architecture

Italian degree classification L-4 Architectural Science – 180 ECTS – EQF level 6 | Polytechnic University of Torino

Internship at Soprintendenza Archeologia Belle arti e Paesaggio per la città metropolitana di Torino.

LANGUAGE SKILLS

Native speaker It

Italian

Listening

English

LIIBIIS

French

Spanish

C1	C1	C1	B2
Self-assessment. C1-C1-B1-B2 evaluated by the University of Cambridge LinguaSkill Test on 2021 October 14			
B2	B2	B2	A2
Self-assessment			
B1	A1	A1	A1
Self-assessment			

Speaking

Writing

HORIZONTAL SKILLS

2011- ongoing

Civil protection and Forest Fire-fighters Corps

Piedmont voluntary forest fire-fighting Corps- https://www.corpoaibpiemonte.it/

I'm trained and licensed for operational tasks, including heli-transported emergency activities. I have field experience in managing wildfires in Alpine and Mediterranean environments and floods. From 2019 to 2021, I was part of the Decision Support and Communication Unit. I participated in three north-south Italian cooperation missions on fire management.

2017 February – 2017 June

Facilitator | Insieme in Piazza Livio Bianco

Cascina Roccafranca Foundation & Cooperativa Stranaidea, Turin, Italy

A workshop to engage citizens and people experiencing homelessness in the Mirafiori Nord district of Turin in caring green areas of the Livio Bianco plaza. I was responsible for the design and the technical direction of the activities carried out by the group, acting as the on-site team leader and responding to public managers and project sponsors.

2015 September – 2016 November

Leading member | POLiPOssibile

Polytechnic of Turin, via Duca degli Abruzzi, Turin, Italy

POLiPOssibile was a project for the collective design of public spaces of the Polytechnic of Turin and the engagement of the student community, funded by the 2015 call for proposals for student projects. I dealt mainly with project management, sociological surveys and organising conferences and meetings.

2015 October

Organizer | Scientific Conference "Sulla città che cambia"

University of Turin, Palazzo del Rettorato, Via Giuseppe Verdi 8, Turin, Italy // sullacittachecambia.wordpress.com

I was in charge of the event planning, including public relations and logistics. Funded by the Fondo Ricerca e Talenti Foundation, this 3-days conference brought together professors, stakeholders and public managers to discuss the future of urban regeneration. Scientific referents: Egidio Dansero (Unito), Stefania Ravazzi (Unito).

2014 May – 2014 June

Organizer | Workshop "Walkscapes Lucento. Reading and analysis of the urban space"

"Principessa Isabella" Cultural Centre, Turin, Italy

Organiser and tutor of the workshop, in collaboration with the DIST Department of the Polytechnic of Turin and the Historical Documentation Center of the City of Turin. The workshop aimed to share scientific knowledge on the Lucento district and to promote exchange between the stakeholders involved in the regeneration of the ex-ThyssenKrupp industrial site. Scientific referents: Andrea Bocco, Alfredo Mela, Chiara Devoti (Polito).

OTHER

Memberships

- Member of the ISIPM Italian Institute for Project Management, 2021-2024
- Member of the AFE Association of Fire Ecology, 2022-2023

Certificates/Licenses

- ISIPM Base, Certified Project Manager by the Italian Institute for Project Management
- CSE/CSP Certified Manager for Health and Safety in construction workplaces (cfr. Italian Law 81/2008)
- Licensed Drones and Unmanned Aircraft Systems (UAS) pilot EU Open A1/A3/A2 categories
- UN BSAFE United Nations security awareness training
- UN Ethics and Integrity at the United Nations training
- FAO's Protection from Sexual Exploitation and Abuse training
- FAO's Prevention of Harassment, Sexual Harassment and Abuse of Authority training
- FAO's Whistleblower Protection Policy training
- FAO's Giving and Receiving Feedback & Appraising Effectively course

Courses/Workshop

- Forest and Land Monitoring for Climate Action SEPAL 2023 May, Food and Agriculture Organization of the UN
- Ways forward: integrated fire management 2022 September, WIMEK Wageningen Institute for Environment and Climate Research, Wageningen, Netherlands. ECTS 3
- Bridging the gap between fire ecology and fire behaviour 2022 June, FIRElinks project, Pau-Costa Foundation and Polytechnic University of Catalunya, Barcelona, Spain.
- Making Change: Science Policy Interaction 2022 April, CERIDES European University of Cyprus. ECTS 2
- Risk Communication 2022 April, European Forest Institute, European University of Cyprus
- Project Management Basic Course 2020 November, LUISS Business School, Rome
- Wildfires Analyst course 2020 April and May, Corpo Forestale e di Vigilanza Ambientale, Forestry Corps of Sardinia Region
- Europrogettazione course on design and management of projects funded by European grants 2018 October, Europa Cube Innovation Business School
- Comunicare la ricerca training on scientific results' dissemination 2016 September, Incubator for Creative and Cultural Entrepreneurship of the University of Turin

Publications/Conferences

- Pooja Pandey et al. *A global outlook on increasing wildfire risk: Current policy situation and future pathways.* Trees, Forests and People, Volume 14, 2023, 100431, ISSN 2666-7193, https://doi.org/10.1016/j.tfp.2023.100431 (Winner article of the Elsevier Atlas Award 2024)
- Food Security Information Network. Global Report on Food Crises (GRFC) 2024.
 https://www.fsinplatform.org/report/global-report-food-crises-2024/

- Contributor to Mauri, E., Hernández Paredes, E., Núñez Blanco, I., García Feced, C. 2023. Key Recommendations on Wildfire Prevention in the Mediterranean. European Forest Institute. DOI: https://doi.org/10.36333/rs6
- Costa-Saura et al., Predicting and Mapping Potential Fire Severity for Risk Analysis at Regional Level Using Google Earth Engine. Remote Sensing, 2022, 14.19: 4812. DOI: doi.org/10.3390/rs14194812
- Spano D. et al., G20 Climate Risk Atlas. Impacts, policy and economics in the G20, 2021, DOI: 10.25424/cmcc/g20 climaterisks
- Maggi C., Ribotta C., Sandri Giachino G., 2015, "Walkscapes Lucento. Studi, pratiche, periferia e spazio urbano", 5th
 Municipality of Città di Torino and Polytechnic of Torino, ISBN 979-12-200-0212-7
- J.M. Costa Saura, C. Ribotta, V. Bacciu, C. Sirca, D. Spano, 2021, "T.2.5.1 Report on wildfires causes and regime", University of Sassari, Departement of Agriculture. Interreg Italy-France MED-Star project
- E. Maillé, C. Ribotta, J.M. Costa-Saura, D. Caballero, C. Bouillon, C. Sirca, D. Spano, 2022, "T.1.2.1 Report on the multi-criteria methodology for determining the wildfire risk at the wildland-urban interface", INRAE National
 Research Institute for Agriculture and Environment, RECOVER unit. Interreg Italy-France MED-Star – INTERMED project
- 2023, 8th International Wildland Fire Conference, Towards the Development of an International Landscape Fire Governance Framework. AGIF- Portuguese agency for integrated management of rural fires. Poster: A global perspective on the wildland-urban interface (WUI) wildfire topic, C.Ribotta, L.Steil, P.Moore
- 2023, Pyrolife 2023 Conference: The four axes of diversity of wildfire. Pau Costa Foundation, UOC Universitat Obierta de Catalunya, Wageningen U&R. Barcelona, Spain. Presentation: Perspectives on the wildland-urban interfaces, C.Ribotta et al.
- 2022, FAB Fire Across Boundaries Conference, AFE Association for Fire Ecology UniFi University of Florence.
 Poster title: Assessment of the fire safety and defensible space around buildings in southeastern France WUI areas,
 C. Ribotta, A.Ganteaume
- 2022, ICFBR International Conference on Fire Behaviour and Remote Sensing, Alghero, Italy. Poster title: Mapping
 fire ignition probability through a two-level approach in a Mediterranean area: the Corse (France) case study, C.
 Ribotta, J.M. Costa Saura, V. Bacciu, A. Massaiu, C. Sirca, D. Spano
- 2022, ICFBR International Conference on Fire Behaviour and Remote Sensing, Alghero, Italy. Poster title: Spatial variability of wildfire causes in French Eastern Mediterranean regions, C. Ribotta, J.M. Costa Saura, V. Bacciu, A. Massaiu, C. Sirca, D. Spano
- 2022, ICFBR International Conference on Fire Behaviour and Remote Sensing, Alghero, Italy. Poster title: A Review of Recent Climate Evolution, Projected Climate Change and Its Impacts on Future Fire Regime and Behavior in the Italy-France Maritime Cooperation Area (Sardinia, Corsica, Tuscany, Liguria and Provence-Alpes-Côte d'Azur), Bacciu, V., Mereu, V., Sirca, C., Saura, J. M. C., Ribotta, C., & Spano, D.
- 2021, 9th SISC- Italian Society of Climate Sciences Conference. Poster title: Assessing future wildfire impacts across G20 countries, Authors: J.M. Costa Saura, C. Ribotta, V. Bacciu, C. Sirca, D. Spano

References on request. The proper names and qualifications have been adapted to the English language. I declare that what is written in this CV is true and that I am aware of the DPR 445/2000 of the Italian law. In compliance with the GDPR (EU Regulation 2016/679), I authorise the use and processing of the personal data in this document.

Updated to 2024 November 11