

Curriculum vitae

Marco Ciolli

1 Curriculum

1.1 Biography

- Born in Firenze (Florence, Italy) 12/5/1964
- High school diploma 1983, Liceo Classico "Galileo", Florence
- Degree in Forestry 1991, Faculty of Agronomy, University of Florence 110 summa cum laude
- 1992 one year at Sylviculture Department of Comunità Montana del Casentino (AR, Italy).
- 1993 Professional qualification (Abilitazione professionale)
- 1993-2001 research fellow with PhD and post-doc scholarships at DICA, Department of Civil and Environmental Engineering, University of Trento.
- 1998 **PhD** in Forest Assessment and Planning, University of Tuscia, Italy
- 1999-2009 Coordinator of Natural Science sector at SSIS (University School for Teachers) Rovereto.
- 2002-2021 Assistant Professor (Ricercatore) at the University of Trento
- **Current position: Associate Professor – Professore Associato**
- **Current affiliations:** **DICAM** - Department of Civil Environmental and Mechanical Engineering, University of Trento, Italy and **C3A** - Center Agriculture Food Environment - joint research and education center between the University of Trento and Fondazione Edmund Mach, FEM
- **ASN Abilitazione Scientifica Nazionale - National Scientific Qualification as full professor** in the Italian higher education system, call 2021/2023 (Ministerial Decree n. 553/2021 and 589/2021) for the disciplinary field of 07/B2 Arboriculture and forest systems. (Academic Recruitment Field 07/B Agricultural and forest systems, according to the national classification) valid until 05/06/2034.

1.2 Research interests

- Applied ecology, Forestry, Planning of natural resources, GIS Modelling of natural resources management and renewable energy development (forest biomass, solar), Landscape ecology, Ecological corridors, Forest change scenarios, Markov chain modelling, Remote Sensing, Forest cartography, Floristic inventories, Ecological informatics, Alien Species, Ecological modeling, Tropical Ecology, Wildlife conservation, Camera traps, Ecosystem Services, Rural Urban metabolism, Traditional Ecological Knowledge.

1.3 Activity as Journals and Proceedings Editor, and as Project referee

- Member of the Advisory Review board of the international Journal iForest - Biogeoscience and Forestry (SISEF) since 2010
- Member of the Editorial committee of Dendronatura since 2006
- Since 2012 referee for PRIN (Research Programs of National Relevance) COFIN and FIRB projects.
- Guest editor for Special Issue "Future and Feature Paper in Environment and Applied Ecology" published in the International Journal of Environmental Research and Public Health (ISSN 1660-4601) Current Impact Factor: 4.614 5-year IF: 4.799. The special issue belongs to the section "Environmental Science and Engineering" https://www.mdpi.com/journal/ijerph/special_issues/Feature_Paper_E_AE
- Editor of the proceedings of the Academic Track of the conference: [Free and Open Source Software for Geospatial \(FOSS4G\) 2022 - 22–28 August 2022](#), Florence, Italy, published in: The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - Publications Copernicus Volume XLVIII-4/W1-2022, 2022 | ISPRS WG IV/4, III/10, IV/7, V/1 & ICWG IV/III.

Editor(s): M. A. Brovelli, M. Ciolli, and M. Minghini Marco Ciolli is Co-chair of the Academic Track of the conference: [Free and Open Source Software for Geospatial \(FOSS4G\) 2022](#) - 22–28 August 2022, Florence, Italy. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences (ISPRS Archives) is the series of peer-reviewed proceedings published by the INTERNATIONAL SOCIETY OF PHOTOGRAFOMETRY AND REMOTE SENSING (ISPRS). The Archives are listed in the ISI Conference Proceedings Citation Index (CPCI) of the Web of Science, SCOPUS, the E/I Compendex, and the Directory of Open Access Journals (DOAJ). The Archives are published under the Creative Common Attribution 3.0 (4.0 since June 2017) [License](#).

1.4 Member of Bodies, organizations

- Member and co-chair of the UNESCO Chair in Engineering for Human and Sustainable Development, University of Trento since 2011.
- Member of OSGEO association (Open Source Geospatial Foundation), and member of Geoforall and of Education and curriculum committee of OSGEO association.
- Charter member and co-founder of the Italian OSGEO chapter.
- Member of Geoforall "Geo for All" Open Source Geospatial Foundation's Open Educational outreach with partners worldwide with the mission for making geospatial education & opportunities since 2016
- Member of CUDAM University Centre for Advanced Studies on Hydrogeological Risk in Mountain Areas, Centre of excellence of the Italian Ministry for Education, University and Research.

1.5 Academic and Institutional activity

1.5.1 Courses and didactic activity coordination

- **Teaching hours:** According to didactic activity official registers of University of Trento Marco Ciolli taught different courses in English and Italian for a total of around 2500 hours since 2002.
- **Since 2016 Professor of Field sampling and Spatial Ecological Modelling** PhD course (40 hours) at C3A Center Agriculture Food Environment Doctoral School, University of Trento.
- **2011-2016** in the frame of Unesco Chair he directed, organized and taught the Summer School: "Tropical rainforest biodiversity: field and GIS tools for assessing, monitoring and mapping" Udzungwa Mountains National Park, Tanzania in partnership with Museo delle Scienze di Trento, Tanzania National Parks, Danish Museum of Natural History, University of Copenhagen, Wildlife Conservation Society. A total of 110 Learners attended the 2011-12-13-15-16 editions.
- **2011-2016** he contributed to design TFA and PAS (University Courses for Teachers with Tirocinium) at University of Trento, coordinated tutors and supervisors, President and Member of the national examination commission for Natural science (Commissione esami finali PAS classe A059) he taught the courses: **Laboratori didattici di biologia, scienze della vita e scienze naturali** (12 hours), **Didattica delle scienze per la SSIG** (16 hours), **Didattica delle scienze per la PAS** (12 hours).
- **Since 2010 Professor of Applied Ecology (Ecologia Applicata)** (60 hours) **master degree course of Environmental Engineering, University of Trento, DICAM.**
- **2008-2012 Professor of Ecology for economists (Ecologia 2)** (40 hours) Master degree course in Economy and Management of environment and tourism, Faculty of Economy of Trento.
- **Since 2007 Professor of Environmental data management and analysis** (60 hours) PhD course at Doctoral School in Environmental Engineering, University of Trento.
- **2005-2010 Professor of the module Ecology (Ecologia)** TPALL degree course: Tecniche della prevenzione nell'ambiente e nei luoghi di lavoro (40 hours), Universities of Trento and Verona.
- **2005-2010** he taught the Course: **Ecologia dei paesi Tropicali e subtropicali** (20 hours) (corsi di laurea triennale) credits type F.

- **2002-2010 Professor of Ecological and Sustainable Planning of Forest Landscape** (60 hours) (Pianificazione Ecologica del Territorio Forestale) Master Degree in Environmental Engineering, Faculty of Engineering Trento.
- **2004-2007 GIS e Telerilevamento, Botanica, Interazione genotipo ed ambiente** (30 hours each), in the frame of the master degree “Viticoltura, Enologia e Mercati Vitivinicoli”, organized by a consortium of the Universities of Trento, Padova, Trieste and Istituto Agrario di S. Michele all'Adige.
- **2000-2002 Professor in the course: Pianificazione Ecologica del Territorio Forestale.** (20 hours module of 60 total hours) Corso di Laurea in Ingegneria per l'Ambiente e il Territorio dell'Università di Ingegneria di Trento, while from 1996 to 2000 he collaborated in didactic activity as tutor, assistant lecturer (esercitatore) and examiner.
- **Since 1996** He covered the role of examiner for Corso di Tecnologia del Legno e dei Materiali Legnosi.
- **1999-2009** he contributed to design the scientific program and content of Rovereto SSIS (University School of Teachers Education) of the University of Trento and was **responsible for didactic in Natural Science** coordinating the work of tutors and supervisors. He taught the courses: **Didattica delle Scienze** (24 hours), **Ecologia** (60 hours), **Ecologia Applicata** (24 hours), **Sviluppo Sostenibile** (24 hours), **Ecologia e Sviluppo Sostenibile** (24 hours), **Botanica** (24 hours), **Temi didattici e piani di studio** (24 hours), **Aspetti pedagogici dell'insegnamento delle scienze** (24 hours), **Tecnologie informatiche per la didattica delle discipline scientifiche** (20 hours). He coordinated the careers and curriculum of the students and was President and Member of the national examination commissions.

1.5.2 PhD membership

- **Since 21-03-2019** member of **Doctoral School Committee of Scienze Agroalimentari e Ambientali - Agrifood and Environmental Sciences** DOT19FPJLR Trento University
- **From 01-01-2013 to 20-03-2019** member of **Doctoral School Committee of Ingegneria Civile, Ambientale e Meccanica - Environmental Engineering**, DOT1362534 Trento University.

1.5.3 Student tutorship

- **PhD tutor:** Pietro Zambelli XXVI cicle, Gianluca Grilli, Nathalie Cavada XXIX cicle, Robert Malek XXXI cicle, Stefano Gobbi, Andrea Corradini, Sabina Avosani, Chammem Hamza, Imane Akassou XXXII cicle, Angelica Pianegonda XXXVII cicle, Andryei Bulgan University of Ulan Bator, (Mongolia) Erasmus Mundus programme. A sample of supervised thesis: Zambelli P: [A spatial decision support system to assess personal exposure to air pollution integrating sensor measurements](#) Grilli G: [Cost-Benefit analysis using Gis: an application to the forest Bioenergy sector](#) Cavada N: [Modelling environmental changes in the Udzungwa Mountains of Tanzania through impact assessment on rainforest mammals](#) Malek R: [Novel Monitoring and Biological Control of Invasive Insect Pests](#) Avosani S: [Behaviour, ecology, and vibrational manipulation of insect vectors: the case of the meadow spittlebug Philaenus spumarius, with notes on a psyllid pest](#) Corradini A: [Ecological connectivity in the Alpine anthropic matrix. Natural reserves and corridors for the conservation of brown bear in the Alps \(ABC – AlpBearConnect\)](#) Gobbi S [Fine Spatial Scale Modelling of Trentino Past Forest Landscape and Future Changes Scenarios to study ecosystem services through the years](#)

Referee for PhD Thesis: Università Politecnica delle Marche (AN) & Università dell'Insubria (VA).

- **Supervisor** of more than **50 Master's thesis Students** and more than **20 Bachelor's degree** at DICAM. A partial list here: <https://webapps.unitn.it/du/it/Persona/PER0003808/Tesi>
- **2018** supervisor of the Traineeship of Marilou Prudhomme Erasmus Student of Université Toulouse III (France). Brown bear conservation and management: ecological and social aspects.

1.5.4 Research Fellowship responsibility and supervision

2020 Supervisor and responsible for the funding of the Research Fellowship - Assegno di Ricerca (agr05, 07B2): Research support in the project Holistic resilience for the mapping of data and information to implement insurance schemes for forests in mountain environments. 12 months at the Laboratory of Ecology, University of Trento - HOLISTIC RESILIENCE EIT CLIMATE-KIC project.

2020 Supervisor and responsible for the funding of the Research Fellowship - Assegno di Ricerca (agr05, 07B2): Reconnecting City Landscape and Ecosystem to rural and periurban areas: role and potentials of local food systems. 12 months at the Laboratory of Ecology, University of Trento - SATURN EIT CLIMATE-KIC project.

2019 - 2021 Supervisor and responsible for the funding of the Research Fellowship - Assegno di Ricerca – 24 month at C3A University of Trento within the ‘Temporary Protection Project SAR-UniTrento’

2019 Supervisor and responsible for the funding of the Research Fellowship - Assegno di Ricerca (agr05, 07B2): Reconnecting City Landscape and Ecosystem to rural and periurban areas. 24 months at the Laboratory of Ecology, University of Trento - SATURN EIT CLIMATE-KIC project.

2018 Supervisor and responsible for the funding of the Research Fellowship - Assegno di Ricerca (agr05, 07B2): Research regarding standard methods to evaluate the effects of disturbance factors following 2011/484/Ue, for impact assessment through a QGIS plugin for light, thermic pollution, water noise, soil dynamics, marine sediments. 13 months at the Laboratory of Ecology, University of Trento in cooperation with Regione Veneto.

2016 Supervisor and responsible for the funding of the Research Fellowship - Assegno di Ricerca (agr05, 07B2): Research regarding standard methods to evaluate the effects of disturbance factors following 2011/484/Ue, for impact assessment through a QGIS plugin. 18 months at the Laboratory of Ecology, University of Trento in cooperation with Regione Veneto.

2015 Supervisor and responsible for the funding of the Research Fellowship - Assegno di Ricerca (agr05, 07B2): Renewable Energy and Ecosystem Services: a Trade-off Analysis, 18 months at the Laboratory of Ecology, University of Trento in cooperation with Eurac Research EURAC.

2013 Supervisor and responsible for the funding of the Contract Realizzazione di un WEBGIS per la valorizzazione di dati vegetazionali geografici storici. 8 months at the Laboratory of Ecology, University of Trento in the frame of FORCING CARITRO project

2010 Supervisor and responsible for the funding of the Scholarship (agr05, 07B2): Modelli GIS per la disponibilità di biomassa forestale per la produzione energetica in Trentino 18 months at the Laboratory of Ecology, University of Trento in the frame of Biomassfor CARITRO project

2008 Supervisor and responsible for the funding of the Scholarship (agr05, 07B2): Modelli GIS per la disponibilità di biomassa forestale per la produzione energetica in Trentino 6 months at the Laboratory of Ecology, University of Trento

1.5.5 Visiting professor and other appointments

- **From December 2019 to January 2020** Marco Ciolfi was invited as **Visiting Professor** at the Department of Biology, Faculty of Science, Burapha University (BUU) Saen Suk (Chonburi Province - 20131) Thailand. He served as Advisor for the project "Analysis, monitoring and prediction of water quality for sustainable land use of the river basin system in Eastern Economic Corridor (EEC)" research program through National Research Council of Thailand, Burapha University, collaborated on projects related to Geomatics, Ecology, Conservation Biology and Forestry. Marco Ciolfi organized and taught a Workshop in GIS at the Geoinformatic Faculty of Burapha University.

- **Since 2019 Scholars At Risk (SAR)** - DICAM and C3A **Delegate** and supervisor of research fellowship at C3A Responsible in the frame of Project Scholars at Risk with C3A - Protecting scholars and the freedom to think, question, and share ideas.

- **Since 2018** he is member and active participant of two “Laboratori interdipartimentali” FAMA (Rete/Laboratorio per lo studio e la valutazione delle Fragilità in Ambiente Montano Alpino) and UNITN4D (UNITN for Development) of the University of Trento.
- **In 2018** he activated an Erasmus+ with the Universidad de las Palmas de Gran Canaria
- **2008, 2009, 2010, 2011** He taught invited lessons at Università di Roma and Università di Genova.

1.6 Student evaluation of Applied Ecology Course

Last available results from university of Trento survey

AA 2021-22	Evaluation (%) Are you satisfied of the course?
140251 Course Ecologia applicata (Applied Ecology)	100
Media Corso di studio - Average of the courses of the Master degree % (LM CDS_332H Ingegneria per l'ambiente e il territorio)	85

1.7 Technology transfer, education and capacity building

- He is participating and coordinating actions in cooperation projects in the Kilombero Valley, Tanzania and in Vietnam regarding the Measure of Cooking Stoves Pollution using Self Built Arduino Based Sensors in rural areas and a study on Agroforestry in the area of Mangula, Tanzania in order to improve local living conditions and health with [Mazingira](#) Association a non-profit association that carries out development cooperation projects, ensuring environmental conservation.
- **2014**, 4-5 August **Citizen panel**: Gruppo di lavoro per la definizione di alternative sostenibili per l'uso di energie rinnovabili nel Parco delle Alpi Marittime incontri a Valdieri (CN) Tavolo con politici, stakeholders e cittadini. Frame: recharge.green project, 80 Participants.
- **2014**, 4-6 June **Citizen panel**: Gruppo di lavoro per la definizione di alternative sostenibili per l'uso di energie rinnovabili nel Bellunese, Incontri a Longarone e Agordo (BL) Tavolo con politici, sindaci, stakeholders e cittadini. Frame: recharge.green project, 100 participants.
- **2013**, 21 September **Citizen panel**: Gruppo di lavoro per la definizione delle alternative sostenibili per lo sviluppo del paese di Montagne (Trento) con Elena Ianni. Tavolo con politici, sindaco, stakeholders e cittadini, 50 participants.
- **2013** He organized the **Course Biodiversity monitoring techniques and standardization across TANAPA forest parks: training course for forest Park Ecologists** of TANAPA (Tanzania National Parks): held in August 2013. 24 Tanzanian Ecologists attended the course.
- **2010** He organized and taught the **Training course** in GIS Geographic Information System with elements of GPS, May 2010 Byumba, District of Gicumbi, Northern Province, Rwanda, Africa; 20 Local Professionals, technicians and educators attended the course.
- **From 2008 to 2010** he participated in a cooperation project in Rwanda aimed to improve local technical knowledge, provide sustainable renewable energy and improve forest sustainability.
- **Since 2003 director and teacher of the course GRASS and OPEN SOURCE GIS: theory and applications**, University of Trento, DICAM, CUDAM, held each year. A total of 430 Learners attended the different editions of the course.
- **2005**, 26-27 September he organized the course: **Dendrocronologia e GIS, tecniche innovative per lo studio e la caratterizzazione di fenomeni geomorfologici**, Trento-Val di Pejo, Trento University, DICA CUDAM Centro per la Difesa idrogeologica dell'Ambiente Montano, 10 Participants.

1.8 Conference organization

- [**FOSS4G 2023**](#) – Prizren Academic committee chair and Local Organizer of the **FOSS4G 2023 International conference**, Prizren, Kosovo – 26 June - 2 July 2023.
- [**FOSS4G 2022**](#) – Firenze Academic committee chair and Local Organizer of the **FOSS4G 2022**

International conference, Florence – Italy, August 2022.

- [IV Convegno Italiano sui Chiroterri](#), Padova 17-19 October 2019 Gruppo Italiano Ricerca Chiroterri and Associazione Teriologica Italiana, Organizer and Scientific committee member.
- [PECSRL](#) (Permanent European Conference for the Study of the Rural Landscape) biennial International conference “Mountains, uplands, lowlands. European landscapes from an altitudinal perspective”, Innsbruck and Seefeld, Austria 5-9 September 2016, **organizer of Panel session P2:** From memories to future. Multi-disciplinary approaches to governing fragile mountain environments.
- Co-Organizer of the Workshop: “La Carta Forestale del Regno d’Italia: 80 anni di evoluzione delle foreste italiane” Firenze, Giovedì 4 febbraio 2016 Accademia Italiana di Scienze Forestali
- [III Convegno Italiano sui Chiroterri](#), Trento 9-11 October 2015, Organizer and Scientific committee member.
- Energy and nature in the Alps: a balancing act - recharge.green final conference, 20-21 May 2015 Sonthofen, Germany, Organizer and Scientific committee member
- XVII Italian Ornithological Conference Trento 11-15 September 2013 Organizer and Scientific committee member.
- XII Meeting of Italian GRASS and GFOSS users, Trento, February 9-1, 2011 Organizer and Scientific committee chair.
- **International conference *Open Source Free Software GIS GRASS users conference 2002*** 11-13 September 2002 Trento, **Organizer and Scientific committee chair.**
- II Meeting of Italian GRASS users, Trento, February 1-2, 2001, Organizer, Scientific committee chair.
- Convegno Sistemi Informativi Territoriali in Trentino: dai sistemi alle applicazioni Trento 9/10/1999, Organizer, Scientific committee chair.
- Since 1999 Member of scientific committees in national and international conferences regarding forest, environment and Free and Open Source Software for Geospatial.

1.9 Invited presentation, keynote speaker at international events

2019 GIS ecosystem mapping and modelling. *International Conference on Biodiversity 2019: IBD2019 - Biodiversity for Sustainable Bioeconomy*. National Science and Technology Development Agency Ministry of Higher Education, Science, Research and Innovation, Ministry of Natural Resources and Environment, 23 May 2019, Bangkok, Thailand.

2016 Landscape modelling, energy production, biodiversity and Ecosystem Services: study cases in mountain environment. *Biodiversity and Ecosystem Services: the role of endangered species and invasives*. First International Workshop 17 October 2016, Innsbruck, Austria

2015 Ecosystems services, decision support systems and participative approach in planning: experiences and lessons learned in the Alpine Region. *European Forestry Commission - 30th session of the EFC WP MMW* - Working Party on the Management of Mountain Watersheds - Mountain Watersheds and Ecosystem Services: Balancing multiple demands of forest management in head-watersheds and Stakeholder Training Dialogue with Experts from the Alpine Convention. 23 September 2015, Pieve Tesino, Trento, Italy.

2015 Application of r.green DSS in pilot areas with focus on conflicts. *Engagement and conflict prevention in Nature Conservation*. International Seminar on the creation of reliable acceptance for conservation measures. Baltic Environmental Forum Germany e.V. (BEF) in cooperation with Lower Saxony Water Management, Coastal Defense and Nature Conservation Agency (NLWKN) in the framework of the Lower Saxony EU LIFE+ project “Meadow Birds” 9 June 2015 Hamburg, Germany

1.10 Making Science accessible to general public & Science communication

2020 [Interview for the Project Saturn](#). Framework: Saturn EIT Climate KIC project.

2016 Newspaper Repubblica, [L'orso bruno sulle Alpi del Trentino: per sopravvivere occorre migrare.](#)

2014 Participation in the Documentary: All'ombra degli Udzungwa, di Massimo Gabbani Italia 33' presented at Trento Film Festival. Framework: Unesco Chair.

2014, February 18 at 15.00 RAI 2 (Radio 2) Thematic Invited Interview: Le foreste in Trentino.

2013 November 12-13 RSI Radio Svizzera Italiana, two invited Radio interviews by Marco Ciolfi at the International conference on balancing renewable energy and nature in the Alps Brig, Switzerland, Briga, CH. Framework: recharge.green project.

2011 May 19-20 Bioweek 2011, Trento, with Muse Trento, he organized and presented the Workshop "Laboratorio Formativo: Biodiversità per lo sviluppo e la lotta alla povertà".

1.11 Awards

2022: **Green Infrastructure goes business Award 2022** with University Startup RUMA EUSALP Action EU strategy for The Alpine region Group 7 To Develop Ecological connectivity in EUSALP Territory, [Eusalp, ufficio stampa PAT, Newspaper, Award Video.](#)

2021: **Horizon Result Booster**, Trentino Startup Valley, Startup Lab (UniTrento) with University Startup RUMA.

2 Research projects

Date	Funding Body	Role	Project Title
1993-1995	CFS State Forestry Corps - MRAAF Italian Ministry of Agriculture, Food, Forest Resources	Participant	La foresta e i suoi valori , studio interdisciplinare in pianificazione forestale" (The forest and forest values, Interdisciplinary studies in forest planning)
1995	DICA Department of Civil and Environmental Engineering	Participant	Tipologia, produttività e trattamento selviculturale delle peccete della val di Fiemme (Forest types productivity and forest sylviculture management in spruce forests of Fiemme valley)
1995	DICA Department of Civil and Environmental Engineering	Participant	"Regional forest planning" (Pianificazione forestale regionale)
1996-1997	DICA Dep. of Civil and Environm. Engineering	Participant	"Forest Trees growth rhythm"(Ritmi di accrescimento degli alberi forestali)
1998	DICA Dep. of Civil and Environm. Engineering	Participant	"Forest types, ecological approach to forest management" (Tipologie forestali, approccio ecologico alla gestione forestale)
1998	DICA Department of Civil and Environmental Engineering	Participant	"Restoration of Brenta River" (Riqualificazione dell'asta fluviale del Brenta). Study of DICA for Comprensorio della Bassa Valsugana e del Tesino)
1998	Comunità Montana della Valle Cannobina	Participant	Landscape and Ecological plan Valle Cannobina (Piedmont)" Realizzazione del Piano ecologico territoriale della Valle Cannobina. Study of DICA for Comunità Montana della Valle Cannobina (VCO)
1998	DICA Department of Civil and Environmental Engineering	Participant	"Ecological approach to sustainable management and forest planning" (Approccio ecologico alla gestione sostenibile ed alla pianificazione forestale) Ecosistemi montani
1999	DICA Department of Civil and Environmental Engineering	Participant	"Ecological approach to sustainable management and forest planning integrating GIS and field techniques" (Approccio ecologico alla gestione sostenibile ed alla pianificazione forestale mediante l'integrazione di tecniche GIS e di campo)
2000	APPA Agenzia Provinciale Protezione dell'Ambiente - PAT Provincia Autonoma di Trento	Scientific responsible for Forest Management Sustainability	Progetto per lo sviluppo sostenibile del Trentino , Sostenibilità negli ambienti forestali, WP Indicatori per la gestione sostenibile delle foreste "Project for sustainable development of Trentino, Forest sustainability, Indicators of Sustainable Forest Management"

2001	PAT Provincia Autonoma di Trento	Participant	PAT-UNITN New methods to study avalanche risks: integrating dendrochronological, GIS, GPS techniques and mathematical modeling in Val dei Spini (Pejo, TN)
2003-2004	PAT Provincia Autonoma di Trento	Participant	PAT-UNITN Integrated evaluation of hydrogeological risks in alpine conoids"
2001-2007	MiPAAF Italian Ministry of agriculture food, forestry policies	Coordinator of Subproject 4.2	RISELVITALIA, Ri.Selv.Italia (Common research Program about Sylviculture in ITALY), Subproject 4.2 - Information Systems to support forest management (Sistemi informativi di supporto per la gestione forestale)
2005-2006	MIUR Italian Ministry for Education University and Research	Participant	MIUR-Cofin 2004 "Advanced structures of numerical cartography for GIS and WEB environment" "Strutture evolute della cartografia numerica per i GIS e l'ambiente WEB"
2004-2005	EU European Union	Participant	ENSPADS : Expertise Network for Spatial Planning and Decision Support (ENSPADS)", ASEAN-EU University Network Programme (AUNP)"
2005	PAT Provincia Autonoma di Trento	Participant (Cooperation Project)	"Acqua sicura (Safe Water)" Fondazione de Carneri, ISF (Engineering Without Borders), PAT (Provincia Autonoma di Trento), Pemba Island, Tanzania 2005
2005	EU European Union	Sub-contractor	UTN Urban Technology Network II Pilot Cooperation UGN (Urban GIS Network) INTERREG IIIB CADSES
2008-2009	MIUR Italian Ministry for Education, University and Research	Participant	MIUR-COFIN 2007 "Interoperability and cooperative management of geographic, dynamic, multidimensional and distributed data with Free and Open Source GIS"
2008-2010	EU European Commission EuropeAid/122979/C/ ACT/ACP-9° Fonds européen 2,000,000 E	Coordinator of the GIS unit of the University of Trento. (Cooperation Project)	FACILITE ACP-UE POUR L'EAU –Actions dans les Payes ACP–Appel à proposition de développement: "Interventions pour le renforcement du réseau hydraulique, pour la protection de l'environnement et la sensibilisation à un usage responsable en collaboration avec le District de Gicumbi dans la Province du Nord" RWANDA, in the frame of ACP projects
2010-2013	CFS State Forestry Corps & CRA-MPF Council for Research in Agriculture Forest Planning Monitoring	Coordinator and PI	Digital recovery of 1936 Italian kingdom forest map by Regio Corpo Forestale (Royal forest corps)
2010-2012	Caritro Foundation Fondazione Cassa di Risparmio di Trento e Rovereto Total 545,000 E [40101590]	Coordinator, of WP and PI Total 126,312 Finan. 58,472 Cofin. 67,850	BIOMASFOR , "Biomassfor project. Potentially, energetic innovation, ecological and economic sustainability of Trentino forest biomasses"
2012	CAM Consorzio Associazioni con il Mozambico - Tavolo Trentino Mozambico	Scientific Responsible (Cooperation Project)	Study of the Biodiversity of Sofala , Caia and Marromeu districts (Mozambique); (Studio sulla biodiversità dell'area di Sofala, Caia e Marromeu) commissioned in the frame of the Revision of the Urban and environmental Plan of the area.
2011-2013	Caritro Foundation Fondazione Cassa di Risparmio di Trento e Rovereto Total 15,000 E [40102230]	Project Leader and Scientific Coordinator 15,000 E	FORCING "Recovery and valorization of Smith forest Belt archive in the Provincia Autonoma di Trento (FORCING)" http://meteogis.fmach.it/forcing/mappa/index.php
2013-2015	EU European Union 2,100,000 [30103189]	Sub-contractor 39,400 E	Recharge.green project Alpine Space programme: Valuing Alpine ecosystems: reconciling renewable energy production and biodiversity conservation. Subcontractor for the action Development of a Decision Support System in GIS environment for the analysis of renewable energy http://www.recharge-green.eu/
2016-2017	Regione Veneto 50,000 E [40102740]	Project Leader and Scientific Coordinator 50,000 E	Standard methods to evaluate the effects of disturbance factors following 2011/484/Ue for impact assessment through a QGIS plugin
2016-2017	Chiesa Valdese Mazingira Tanzania and GTV Gruppo Trentino Volontariato 38,000 E	Scientific Coordinator and responsible (Cooperation Project)	Efficient cooking technologies in Tanzania and Vietnam - Experiences aimed to improve the life of local communities that depend on forest resources through emission measurement (Tecnologie di combustione efficienti in Tanzania e Vietnam – Esperienze a confronto per migliorare la vita delle comunità locali dipendenti da risorse forestali, con l'ausilio di analisi delle emissioni ed efficienza delle tecnologie proposte)

2017-2020	EU European Union Horizon 2020	Participant	Innoforest – Innovation in forestry sector in Europe
2018-2020	National Research Council of Thailand	Project Advisor	Analysis, monitoring and prediction of water quality for sustainable land use of the river basin system in Eastern Economic Corridor (EEC), research program through National Research Council of Thailand, Burapha University
2018-2019	Regione Veneto 35,000 E [40103210]	Project Leader and Scientific Coordinator 35,000 E	Definition of standard methods to evaluate the effects of disturbance factors following 2011/484/Ue, for impact assessment through a QGIS plugin for light, thermic pollution, water noise, soil dynamics, marine sediments - Definizione di metodi standard e di applicativi informatici per il calcolo degli effetti dei fattori di perturbazione ai sensi della decisione 2011/484/Ue per la valutazione di incidenza - Inquinamento luminoso, termico, nel suolo, sedimenti marini, rumore in acqua
2019	European Union - EIT Climate-KIC Total 89,625 [40103496]	WP Scientific Coordinator, PI Total 32,500 Finan. 24,200 Cofin. 8,300	Deep Demonstrations in Forging resilience in Dolomites – Goethe. aimed to support the communities of Dolomite territories in coping systemically the components of environmental instability connected to climate change and to face resiliently the economic, financial and social change uncertainties
2020	European Union - EIT Climate-KIC Total 115,875 [40103595]	Project Leader Coordinator, PI Total 115,875 Finan. 92,700 Cofin. 23,175	Deep Demonstrations in Forging resilience in Dolomites 2 - aimed to support the communities of Dolomite territories in coping systemically the components of environmental instability connected to climate change and to face resiliently the economic, financial and social change uncertainties https://italy.climate-kic.org/projects/forging-resilience-in-dolomites-deep-demonstration/
2019-2021	SAR Scholars at Risk, C3A Center Agriculture Food Environment Total 30,968 [40202299]	Coordinator Total 60,968	Responsible for the Research in the frame of Project Scholars at Risk with C3A - Protecting scholars and the freedom to think, question, and share ideas
2020	European Union - EIT Climate-KIC Total 124,860 [40103262]	Project Leader Coordinator, PI Total 124,860 Finan. 89,888 Cofin. 25,973	HOLISTIC RESILIENCE - Creating insurance and de-risking schemes to increase the resilience of forests and mountain landscapes to extraordinary meteorological events. https://holisticresilience.dicam.unitn.it/index_eng.html
2018-2021	European Union - EIT Climate-KIC Total 1,492,303 [40103262]	WP Scientific Coordinator and PI Total 195,625 Finan. 134,625 Cofin. 61,000	SATURN - System and sustainable Approach to virTuous interaction of Urban and Rural LaNdscapes. Reconnect Urban and rural environment creating an ecosystems of actors from public, private and academia sectors to guide and nurture innovation in the sustainable use of peri-urban area with systemic approach. The framework includes tools, indicators and collection of best practices to support policy makers and integrated planning. https://eventi.fmach.it/saturn
2023-2026	European Union Biodiversa+ EPSS Total 1,323,040	WP Scientific Coordinator and UNITN PI Total 264,000 Finan. 184,800 Cofin. 80,000	TransWILD - Biodiversa+ 2021-276 Transformative wildlife management to enhance biodiversity protection and ecosystem services provision in shared and protected multi-use landscapes across Europe (TransWILD). Biodiversa+ is EU co-funded biodiversity partnership supporting research on biodiversity jointly developed by BiodivERsA and EU Commission (DG Research & Innovation and DG Environment)

Note: **EIT CLIMATE-KIC:** The EIT is an integral part of **Horizon 2020**, the EU's Framework Programme for Research and Innovation. Financed by EU, <https://eit.europa.eu/> and Climate KIC: <https://www.climate-kic.org/>. EIT-Climate KIC is a Knowledge and Innovation Community (KIC), working to accelerate the transition to a zero-carbon, climate-resilient society supported by the European Institute of Innovation and Technology. Where MC had the financial responsibility, in the field "Funding body" the Total budget of each project is reported with UNITN SAP code, in the field "Role" the budget managed by MC is reported. A list of projects since 2011 can be found at: <https://webapps.unitn.it/du/it/Persona/PER0003808/Progetti>

2.1 Language skills CEFR (C2 Mastery or proficiency - A1 Breakthrough or beginner)

Language	Reading	Speaking	Writing
English	C2	C2	C2
French	C2	C1	B1

3 Publications

3.1 Journals

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14. CIOULLI M, SGUERSO D, ZATELLI P (2000) *GIS applications with GRASS*, Geomatics Workbooks, Geomatics Laboratory - Politechnic of Milan - Como Campus, n° 1, Autumn 2000, 12 pp.
15. CIOULLI M, FERRETTI F, GHERARDI L (1999) *Ipertesto di Assestamento*. Monti e Boschi n°5 1999 pp. 25-30.
16. CIOULLI M (1999) *GIS Stato dell'arte e prospettive di utilizzo in campo applicativo e scientifico*, Relazione presentata al Convegno dell'Associazione Forestali del Trentino Sistemi Informativi Territoriali in Trentino: dai sistemi alle applicazioni, Trento, 9 Ottobre 1999, Dendronatura n°2 1999 pp 7-16
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3.3 Didactic publications, slides, other resources on line

Didactic publications, Slides of the courses, other didactic material can be found in the esse3 system and moodle platform (including video of the lessons) of the University of Trento and a complete list of all my research output including technical reports can be downloaded at <https://webapps.unitn.it/du/it/Persona/PER0003808/Pubblicazioni>

Marco Ciolfi together with Francesco Geri, Fabio Zottele and Nicola La Porta released the WebGIS <http://meteogis.fmach.it/forcing/mappa/index.php>

Marco Ciolfi was the coordinator of the project and released in Creative Commons 3.0 BY together with Fabrizio Ferretti, Chiara Sboarina, Clara Tattoni, Alfonso Vitti, Paolo Zatelli, Francesco Geri and Enrico Pompei the Italian Kingdom Forest Map of 1936 that represents 1936 Italian forest cover extension and features and can be downloaded at the address: <http://carta1936.dicam.unitn.it/>

3.4 Software and Technology transfer r.green.biomassfor

Biomassfor, A GIS GRASS extension to assess the exploitability of forest biomass residues taking into account different (ground and cable) harvesting techniques, can be found here: <http://sourceforge.net/projects/biomassfor/>

The software r.green.biomassfor, A GIS GRASS add-on to assess the exploitability of forest biomass residues taking into account different (ground and cable) harvesting techniques, including the

evaluation of ecosystem services can be found at the add-on page of GRASS.
<https://grass.osgeo.org/grass70/manuals/addons/r.green.biomassfor.html>

EnviFate QGIS plugin: Open source tool for environmental risk analysis, EnviFate software is currently under development by DICAM of the University of Trento, Italy, in the frame of the project "Definizione di metodi standard e di strumenti applicativi informatici per il calcolo degli effetti dei fattori di perturbazione ai sensi della decisione 2011/484/Ue, da impiegarsi nell'ambito della valutazione di incidenza - Inquinamento luminoso, inquinamento termico, rumore in acqua, dinamica inquinanti nel suolo, dispersione sedimenti marini", funded by the Italian Veneto Region. The project aims to make available to non-specialist operators a set of tools able to perform screening analysis to assess the risks of different possible environmental pollution sources in protected areas. Authors: Marco Ciolfi (supervisor and scientific responsible of the project), Francesco Geri (Software development), Paolo Zatelli and Oscar Cainelli (Technical and scientific consultants) and Gianluca Salogni (Technical and scientific referent for Regione Veneto). **In 2018 ENVIFATE was included in “Progetti Strategici” of Regione Veneto.** GPL license v3. <https://bitbucket.org/fragit/envifate/>

3.4 Startup creation

Marco Ciolfi is co-founder and Scientific Advisor of RUMA, an Innovative Startup and Benefit Corporation and UNITN spin-off. RUMA helps companies and institutions involved in environmental regeneration projects to scientifically valorize and demonstrate the benefits given of their initiatives by measuring and tracking the carbon stock, biodiversity, soil quality, and supporting parameters to cope climate change. <https://www.rumagency.it/> RUMA was selected for the Horizon Results booster program from the EU Commission; RUMA was selected for the Trentino Startup Valley program and is one of the winners of the Green Infrastructure Business Award.

Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base all'art. 13 GDPR 679/16.



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