



Alberto Vavassori

curriculum vitae

Personal Information

Surname	Vavassori
Name	Alberto
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Nationality	Italian
Date of birth	25/12/1995

Education

Nov. 2021 – present	PhD in Environmental and Infrastructure Engineering , Politecnico di Milano, Milan, Italy Research topic: Geospatial Enablement for Climate Change Impact Mitigation on Cities and Urban Resilience Acceleration
2017 – 2019	MSc Degree in Environmental and Land Planning Engineering , Politecnico di Milano, Milan, Italy Grade: 110/110 cum laude Thesis: <i>Una Procedura Semi-Automatica per il Crisis Mapping di Eventi Alluvionali da Immagini Satellitari e VGI</i>
2014 – 2017	BCs Degree in Environmental and Land Planning Engineering , Politecnico di Milano, Milan, Italy Grade: 110/110 cum laude Thesis: <i>Fattori Meteorologici Influenti sul Distacco di una Valanga: il Caso dell'Alta Valtellina</i>

Studies Abroad, Work Experience, Interns

May 2022 – Nov. 2022	Exchange PhD Student , Université de Genève, Institute des Sciences de l'Environnement, Geneva, Switzerland Activities: The research focused on the use of the hyperspectral imagery of the PRISMA mission for the segmentation of urban areas in Local Climate Zones.
Sept. 2020 – Oct. 2021	Temporary Research Fellow , Politecnico di Milano, Milan, Italy Research title: <i>Strumenti e Metodologie di Monitoraggio Innovativi e Condivisione di Dati Geospaziali</i> Activities: Temporary research fellow in the Geomatics and Earth Observation Laboratory. The research focused on GIS, Citizen Science and Remote Sensing for environmental applications.
Feb. 2020 – Sept. 2020	Internship in the field of GIS , Globo srl, viale Europa 17/B, Treviolo (Bergamo) Activities: Support in the elaboration and construction of geospatial databases (urban, cadastral and toponymic) and Web Geoportals for Public Administrations through Geographic Information Systems. The activities also

Sept. 2015

include a contribute during training courses for municipal technicians.

Internship in the field of Environmental Engineering, Ecosphera srl, via Malogno 2, Palazzolo sull'Oglio (Brescia)

Activities: Support in the activities concerning the classification of chemical substances and products used in industrial processes according to the CLP Regulation.

Publications

- [1] Vavassori, A., Biraghi, C.A., Bratic, G., Carrion, D., Zamboni, G., Brovelli, M.A. (2021) Citizen science tools for lake monitoring in the framework of the United Nations Sustainable Development Goals: the project SIMILE. *GI_Forum 2021*, 1, 179-186, doi.org/10.1553/giscience2021_01_s179
- [2] Bratic, G., Vavassori, A., and Brovelli, M. A. (2021) REVIEW OF HIGH-RESOLUTION GLOBAL LAND COVER. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, doi.org/10.5194/isprs-archives-XLIII-B4-2021-175-2021
- [3] Vavassori, A., Oxoli, D., and Brovelli, M. A. (2022) Population Space-Time Patterns Analysis and Anthropic Pressure Assessment of the Insubric Lakes Using User-Generated Geodata. *ISPRS International Journal of Geo-Information*. 2022; 11(3):206. <https://doi.org/10.3390/ijgi11030206>
- [4] Oxoli, D., Vavassori, A., Cedeno Jimenez, J. R., and Brovelli, M. A. (2022) OPEN DATA CUBE APPLICATION TO USER-GENERATED GEODATA: VISITORS TURNOUT INVESTIGATION IN THE INSUBRIA NATURAL PARKS, *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLIII-B4-2022, 267–272, doi.org/10.5194/isprs-archives-XLIII-B4-2022-267-2022

Projects

SIMILE

Sistema Informativo per il Monitoraggio Integrato dei Laghi insubrici e dei loro Ecosistemi

Activities: preparation of the geospatial contextualization basemap for the project's Business Intelligence platform; support in the development and testing of the Web Application for the management of citizen science data.

CIDMA

Climate Change Induced Disaster Management in Africa

Activities: preparation and recording of the following lectures: (1) Basic Data Structures for both Vector and Raster, (2) Metadata, (3) Basic Cartographic Principles.

GIS4Schools

Activities: lecture about vector processing with QGIS, and preparation of the lecture material.

HARMONIA

Development of a Support System for Improved Resilience and Sustainable Urban areas to cope with Climate Change and Extreme Events

Activities: Urban Heat Island investigation; review of conditioning factors of the urban susceptibility to natural and man-induced hazards.

Attended Conferences

ISDE12

12th International Symposium on Digital Earth (6 – 8 July 2021)

Presentation: "Citizen science tools for lake monitoring in the framework of the United Nations Sustainable Development Goals: the project SIMILE"

GIS OSTRAVA 2022

Earth Observation for Smart City and Smart Region (16 – 18 March 2022)

Presentation: "Identification of the Factors Conditioning the Susceptibility of Natural and Man-Made Hazards in an Urban Context"

FBAS 2022

International Forum on Big Data for Sustainable Development Goals (6 – 8 September 2022)

Presentation: "Urban Thermal Comfort and Local Climate Zones in Milan"

Personal and Technical Skills

Languages

Italian (native)

English (Full professional proficiency – FIRST Certificate)

Operating Systems

Windows

Programming languages

Python, Matlab, R (basic)

Software

Office package (Word, Excel, Power Point), LaTeX, QGIS, GRASS GIS, Esri ArcGIS Pro

Certifications

English

Cambridge English – First Certificate in English (Oct. 2016)

Python

IBM – Python for Data Science (Sept. 2020)

Coursera, University of Michigan – Programming for Everybody (Getting Started with Python); Python Data Structures; Using Python to Access Web Data (July 2021)

Drone

UAS Remote Pilot for Open Category A1+A3

EASA Training Zone

Teaching Experience

Nov. 2021

Teaching assistant – BCs Course of Topography at Politecnico di Milano, Leonardo Campus, Milano, Italy. Laboratory of topographic surveying with total station