# Francesco Ioli

PhD student in Environmental and Infrastructure Engineering @ DICA (Polimi) 

T 1	1		•	
Hidilgation	nnd	troi	$n_{1n}$	C
Education	anu	$u_1 a_1$	111111	2
				$\circ$

2017 – 2020 MSc Degree in Environmental and Land Planning Engineering,

Politecnico di Milano, (Italy), Grade 110L/110

Major in Land Monitoring and Diagnostics. MSc Thesis: Evaluation of Airborne Image

 $\label{lem:velocimetry} \textit{Velocimetry approaches with low-cost UAVs in riverine environments}.$ 

09/2019 - 01/2020 Visiting student for MSc thesis development, ETH Zürich, (Switzerland)

01/2019 – 05/2019 Erasmus exchange, Aalto University, Helsinki (Finland)

2014 – 2017 BSc Degree in Environmental and Land Planning Engineering,

Politecnico di Milano, Grade 102/110

Snowpack surveys aimed at hydrological analysis: a case study carried out with UAVs and manual probing measurements on the Belvedere glacier (Macugnaga, Italian Alps).

Working experience

2021 – 2023 **Teaching assistant**, Politecnico di Milano, Courses of: Trattamento delle Osservazini (Statistics), Sistemi Informativi Territoriali (GIS), Tecniche di rilievo e

modellazione 3D per l'architettura (3D modelling for architecture)

 $06/2020-10/2020 \quad \textbf{Internship}, \, Department \,\, of \,\, Civil \,\, and \,\, Environmental \,\, Engineering, \,\, Section \,\, of \,\, Geodesy$ 

and Geomatics, Politecnico di Milano, Supervisor: Prof. L. Pinto

Programming skills

Programming Matlab, Python, R Photogrammetry Agisoft Metashape, PhotoMod-

eler, CloudCompare, MeshLab

Skills

Programming Matlab, Python, R Photogrammetry Agisoft Metashape, PhotoMod-

eler, CloudCompare, MeshLab

GIS QGIS, ESRI ArcGIS Pro & GNSS Leica Infinity & Leica Geo

ArcGIS Desktop, ENVI post-processing Office, RTKLIB

CAD & 3D AutoCAD, ReCap, Autodesk Image processing Adobe Photoshop & Lightroom,

GIMP, RawTherapee, Inkscape

UAVs UgCS, Mission Planner OS Windows, Linux OS (Debian)

Languages

Italian Mother tongue

modelling Fusion 360, Rhino

English C1 *IELTS* certificate (19/07/2018) - British Council

Main publications

2022 Ioli, F., Bianchi, A., Cina, A., De Michele, C., Maschio, P., Passoni, D., Pinto, L., 2022. Mid-Term Monitoring of Glacier's Variations with UAVs: The Example of the Belvedere Glacier. Remote Sensing 14, 28

- 2021 De Gaetani, C.I., Ioli, F., Pinto, L., 2021. Aerial and UAV Images for Photogrammetric Analysis of Belvedere Glacier Evolution in the Period 1977–2019. Remote Sensing 13, 3787.
- 2021 Ioli, F., Pinto, L., and Ferrario, F., 2021. Low-cost Assisted Aerial Triangulation for Sub-decimetric Accuracy with non-RTK UAVs. Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci. XLIII-B2-2021, 25–32
- 2020 Ioli, F., Pinto, L., Passoni, D., Nova, V., Detert, M., 2020. Evaluation of Airborne Image Velocimetry approaches using low-cost UAVs in riverine Environments. Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci. Vol.XLIII-B2-2020, 597–604.
  For a complete and up-to-date publication list, visit Francesco Ioli Scholar page.

## Additional information

# Professional qualification

07/2020 Esame di Stato for Civil and Environmental Engineers

#### Licences

Driving license B

UAS license EASA A2 Open Category, with license for critical standard scenarios

### Volunteer experiences

2017–present Scout chief: children's educator in the Italian Scout association AGESCI

2016–2017 Volunteer for Operazione Mato Grosso (charity organization)

2012–2016 Volunteer for Libera. Associazioni, Nomi e Numeri contro le mafie

March 6, 2023