

Francesco Ioli

*PhD student in Environmental and
Infrastructure Engineering*

Education and training

- 11/2020 – present **PhD student in Environmental and Infrastructure Engineering**, *Department of Civil and Environmental Engineering, Politecnico di Milano, (Italy)*,
Specialization in geomatics, photogrammetry and image-based monitoring techniques.
- 2017–2020 **MSc Degree in Environmental and Land Planning Engineering**,
Politecnico di Milano, (Italy), Grade 110L/110.
Major in Land Monitoring and Diagnostics
- 09/2019–01/2020 **Visiting student for MSc thesis project 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, (Italy), Grade 102/110.
- 07/2017 **Summer School "Progettazione e realizzazione di rilevamenti topografici" on the Belvedere Glacier**, *DICA, Politecnico di Milano, (Italy)*.
- 2009–2014 **High school**, *Liceo Scientifico Falcone e Borsellino, Arese (Italy)*, Grade 92/100.

Work experience

- 10/2020–12/2020 **Teaching assistant**, *Course: Trattamento delle Osservazioni*, Teacher: Prof. B. Betti, *Politecnico di Milano (Italy)*.
- 06/2020–10/2020 **Internship**, *Department of Civil and Environmental Engineering (DICA), Section of Geodesy and Geomatics, Politecnico di Milano, (Italy)*, Supervisor: Prof. L. Pinto.
- 05/2020–07/2020 **Tutoring activity**, *Course: Tecniche di rilievo e modellazione 3D per l'architettura*, Teacher: Prof. Livio Pinto, *Politecnico di Milano (Italy)*.

Publications

- 2020 Ioli, F., Pinto, L., Passoni, D., Nova, V., Detert, M., 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, <https://doi.org/10.5194/isprs-archives-XLIII-B2-2020-597-2020>

Thesis projects

- 09/2019–04/2020 **MSc Thesis**, *ETH Zürich (Switzerland) and Politecnico di Milano (Italy)*,
Evaluation of Airborne Image Velocimetry approaches with low-cost UAVs in riverine environments.
Supervisors: Prof. Livio Pinto (Politecnico di Milano); Dott. Martin Detert (ETH Zürich)
- 04/2017–09/2017 **BSc Thesis**, *Politecnico di Milano, (Italy)*,
Snowpack survey aimed at hydrological analysis: an experimental case carried out with UAVs and manual probing measurements on Belvedere glacier (Macugnaga - VCO).
Supervisor: Prof. Livio Pinto
- 23/03/2018 Presentation of the BSc thesis at DRONITALY 2018 - Working with Drones, Milano (Italy)

Languages

Italian Mother tongue
English C1

IELTS certificate (19/07/2018) - British Council

Computer skills

Programming	Matlab, R, Python, C	OS	Windows, Linux OS (Debian)
Photogrammetry	Agisoft Metashape, PhotoModeler, Pix4D, CloudCompare, MeshLab	GIS	ESRI ArcGIS, QGIS, ENVI
Image processing	Adobe Photoshop and Lightroom, GIMP, Inkscape	CAD	AutoCAD, ReCap

Additional information

Professional qualification

07/2020 *Esame di Stato* for Civil and Environmental Engineers

Licences

Driving license B

UAS license EASA A1-A3 Open Category (*Operazioni Non Critiche*)

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, Nomì e Numeri contro le mafie*

Autorizzo al trattamento dati ai sensi del GDPR 2016/679 del 27 aprile 2016 Regolamento Europeo relativo alla protezione delle persone fisiche per quanto riguarda il trattamento dei dati personali

Autorizzo la pubblicazione del Curriculum Vitae sul sito istituzionale del Politecnico di Milano (sez. Amministrazione Trasparente) in ottemperanza al D. Lgs n. 33 del 14 marzo 2013 (e s.m.i.)