



Mattia Scalas

PhD Candidate

PhD student with a wide variety of interests. Born and raised in Sardinia, I'm specialised in GIS with a self-taught interest in development. Looking for a role where I can grow and learn from experienced colleagues working on innovative solutions. Made to get out of the comfort zone.

WORK EXPERIENCE

Collaborator

Responsible Risk Resilience Centre (R3C - Polito)
November 2020 - Present

- Development of the vulnerability matrix, a GIS-based tool for multi-criteria assessment of municipalities.
- Development of an interactive tool for AHP-like methodology data collection
- Cartography production and scientific writing
- POIs geocoding for Chieri Trade Plan
- GIS analyses for Mappano Local Plan

Adjunct Professor

Politecnico di Torino
September 2022 - Present

- Training and support for students in GIS software in Resilience and Heritage (Architecture MoS) and Design Studio (Urban Planning BoS).

External Collaborator

OnStairs s.r.l.
April 2020 - Present

- Planning and support for cybersecurity training courses and live workshops

Professional Athlete

Aletica Casone Noceto
January 2014 - December 2017

- 2015 National U23 Champion 10K road race
- 2x U23 national team appearances (2014, 2015)

ACADEMIC EXPERIENCES

Publication

CFD-GIS INTEGRATION
November 2021 - June 2022

- Trane, M.; Ricciardi, G.; Scalas, M.; Ellena, M. (2022) From CFD to GIS: a methodology to implement urban microclimate georeferenced databases. In: *TECHNE*, vol. 25, pp. 1-16. ISSN 2239-0243

ESREL Conference 2022, Dublin, Ireland

VULNERABILITY AND RISK EVALUATION
August 2022

- Castro R., David J.; Beltramino, S.; Scalas, M.; Pilone, E.; Demichela, M. (2022) Territorial Representation of a Vulnerability Associated with the Seveso Installations in a Nord Italian Case Study. In: *ESREL2022, Dublin, Ireland*, 28/08/2022 - 01/09/2022, pp. 1463-1470. ISBN: 978-981-18-5183-4

Personal Project

MAPPING GOOGLE MAPS USERS' REVIEWS
May 2022 - June 2022

- Using Python, I carried out a scrape of Google Maps users' reviews of metro stations in Turin. Output: thematic map of station ratings and text analysis with traditional and NLP techniques

Personal Project

CALCULATION OF NDVI THROUGH GEE
January 2022 - March 2022

- Using Google Earth Engine and JS, I calculated the Normalized Difference Vegetation Index of a group of municipalities in Southern Sardinia

Project

CONFIGURATION OF A GIS SERVER
November 2022 - December 2022

- Configuration of a GIS server with open source technologies on a virtual machine and physical media (guided)

EDUCATION

Ph.D. in Urban And Regional Development

Politecnico di Torino
November 2020 - Present

High-level training course "Talents for Fundraising"

Fondazione CRT
March 2020 - December 2020

MoS in Territorial, Urban, Environmental And Landscape Planning

Politecnico di Torino
October 2017 - December 2019

BoS in Architecture

Politecnico di Torino
October 2012 - October 2017

RELEVANT COURSES

- Statistical data processing
- Data mining concepts and algorithms
- BIM and interoperability for SMART Cities
- Gestione avanzata di dati geospaziali
- Droni per la modellazione multiscala 3D del territorio
- Big data processing and programming
- Information visualization and visual analytics
- Text mining and analytics
- IoT platforms for spatial analytics in smart energy systems
- Analisi urbanistiche e territoriali con strumenti GIS

IT SKILLS

QGIS, ArcGIS (Pro, Online), Carto, HTML/CSS, JS, PHP, Python SQL, MySQL, PostgreSQL (PostGIS), Spark, R, Creative Cloud (Illustrator, InDesign), Google Earth Engine, AutoCAD, Revit Geoserver, Leaflet, OpenLayers

SOFT SKILLS

Confident, Fast-Learner, Open-Minded, Calm, Always learning

LANGUAGES

English (FCE Esol Certification), Portuguese (beginner)

VOLUNTEER EXPERIENCE

President

RUN Polito APS-ETS (students union)
November 2019 - December 2021

- Establishment of the association through all legal steps and contribution to the creation of the IT and communication infrastructure

Member

Istituto Nazionale di Urbanistica
November 2020 - Present

Member

GFoss - Associazione Italiana per l'Informazione Geografica libera
August 2021 - Present

INTERESTS

 (Geo)Data Science

 Running

 Machine Learning

 Travelling

 Development

 Cooking