



## **GIEWorks, the Geoinformatics Engineer works!** Meetings with former Geoinformatics students.

May 29<sup>th</sup> 4:30pm - room 2.1.5

Webex room

<https://politecnicomilano.webex.com/meet/giovanna.venuti>

### **Speakers**



#### **Matteo Rizzi**

Matteo is a Senior Product Engineer for the 3D ArcGIS Maps SDK for JavaScript team at the Esri Research and Development Center in Zürich, Switzerland. He joined Esri in 2024, where his work focuses on enhancing 3D web experiences and pushing the boundaries of spatial visualization.

Matteo holds a Bachelor's degree in Computer Science from Università di Milano Bicocca and earned his Master's degree in Geoinformatics Engineering from Politecnico di Milano in 2020. His master's thesis, partially conducted at Aalto University in Finland, involved the design of an innovative WebGIS for

natural park promotion using multi-criteria and spatial algorithms.

Prior to joining Esri, he gained extensive industry experience over five years, as a GIS Engineer at Where Tech. His professional background spans the full stack of geospatial development, including leading technical teams for customers like the Italian Ministry of Tourism or Enel.



#### **Ellen Poli**

Ellen received her MSc degree in Geoinformatics Engineering in 2025, with a thesis titled "Assessing the Key Drivers of Arctic Sea Ice Decline Through Machine Learning Techniques".

She is currently pursuing a PhD at the Space Geodesy group at ETH Zurich, working within the framework of the HiGrav project. Her research focuses on the development of high-resolution gravity field products for improved flood forecasting, by combining GRACE/GRACE-FO satellite data with complementary hydrological datasets. The project is carried out in collaboration with the University of Bern, GFZ Potsdam, and TU Braunschweig.

Her work specifically involves the application of deep learning methods for the generation of high-resolution global hydrological maps, and the development of data-driven approaches for flood prediction and early warning systems.



### **Shengshen Li.**

Shengshen completed his master's degree in 2024 at Politecnico di Milano in Geoinformatics, under the supervision of Prof. Giovanna Venuti, with a thesis on flood prediction in the Seveso area, Lombardy.

He is now a PhD student at Texas Tech University's National Wind Institute, focusing on tornado forecasting. His research integrates AI and multi-source data to improve extreme weather prediction. In parallel, he is also a Research Fellow at the Xi'an Jiaotong Liverpool University.



### **Matteo Gobbi Frattini**

Matteo received his MSc in Geoinformatics Engineering from Politecnico di Milano in 2025, with a thesis titled "Improved SVM for Land Cover Classification". He is currently a Researcher at Ricerca sul Sistema Energetico SpA., where he works on the design and development of full-stack WebGIS applications and geospatial data infrastructures, and is starting to work on machine learning pipelines applied to satellite imagery. Alongside this, he is involved in NEWERA,

an early-stage startup developing real-time digital twins of cities. There, he works on geospatial and 3D urban modelling, GNSS-based surveys, system architecture, and the full-stack development of a WebGIS-oriented analytics dashboard for real-time urban data visualization and infrastructure management.



### **Marianna Alghisi**

Marianna is a Navigation Engineer with 4 years of experience in GNSS across academic and industry-oriented research. She has a BSc in Environmental Engineering and a MSc in Geoinformatics Engineering, with a thesis focusing on GNSS hybridization with 5G technology.

She completed in February 2026 the PhD at Politecnico di Milano, working on the development of hybrid positioning systems integrating GNSS, 5G, and LEO-PNT for precise PNT in harsh environment. During

the PhD joined as a visiting researcher the European Space Agency (ESTEC, Netherlands), collaborating with the LEO-PNT team for the new-born Celeste constellation. She is currently working as Navigation and GNSS Engineer at Nautilus, focusing on precise orbit determination, time synchronization solutions and space oriented GNSS applications.