



Geoinformatics Engineering
Master of Science Degree

Geospatial Processing
Prof. Daniele Oxoli (moderator)
AY 2025-2026

SEMINAR

Air Quality from pictures: Benchmarking and assessment of image-based methods for particulate matter estimation

24 November, 2025, 12:30 – 13:15 CET

Politecnico di Milano – room [T.O.3](#) and online

<https://politecnicomilano.webex.com/meet/daniele.oxoli>

Air quality monitoring is essential for public health, yet traditional sensor networks often provide limited spatial coverage. Recent studies show that visual features in outdoor images—such as colour, lighting, and visibility—can help estimate particulate matter (PM). This seminar explores emerging image-based approaches for PM concentration estimation, where remote sensing and geoinformatics techniques are applied to complement conventional monitoring methods, with preliminary examples also based on local data from the city of Milan (Italy).

Speaker: Eng. Afshin Moazzam



Afshin Moazzam obtained his BSc in Civil Engineering in 2019 in Iran and his MSc in Environmental and Land Planning Engineering from Politecnico di Milano in 2023. Since October 2023, he has been a research fellow and PhD candidate at the GIS-GEOlab (<https://www.gisgeolab.polimi.it>), collaborating on projects related to urban area monitoring using remote sensing and geoinformatics techniques.



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