

## PERSONAL INFORMATION



## Giovanni Moretti

📍 Via Glauco Gottardi 65, 41125 Modena, Italy

📞 +39 348 7624327 📠 +39 059 2056349

✉️ [giovanni.moretti@unimore.it](mailto:giovanni.moretti@unimore.it)

🆔 ORCID [0000-0002-1020-6016](https://orcid.org/0000-0002-1020-6016)

Gender Male | Date of birth 24 January 1977 | Nationality Italian

## WORK EXPERIENCE

November 2018 – Present

## Associate Professor

UNIMORE | Università degli Studi di Modena e Reggio Emilia, Modena, Italy

September 2008 – October 2018

## Research Associate

UNIMORE | Università degli Studi di Modena e Reggio Emilia, Modena, Italy

September 2006 – August 2007

## Post-Doc Researcher

Università degli Studi di Milano, Milano, Italy

## EDUCATION AND TRAINING

2003–2006

## Ph.D. in Hydrology

Università degli Studi di Ferrara, Ferrara, Italy

1995–2001

## M.Sc. Degree in Civil Hydraulic Engineering

Università degli Studi di Ferrara, Ferrara, Italy

## RESEARCH INTERESTS

Terrain analysis. Land-atmosphere interaction. Surface flow propagation. Surface-subsurface flow modelling. Flood protective measures. Flood control reservoirs. Sustainable water resources engineering. Mountain reservoirs. Wildlife impact on levees. Climate modelling.

## EDITORIAL DUTIES

2009–Present

## Peer Reviewer, Water Resources Research

American Geophysical Union

2018–Present

## Peer Reviewer, Journal of Geophysical Research: Earth Surface

American Geophysical Union

2018–Present

## Peer Reviewer, Hydrology and Earth System Sciences

European Geoscience Union

## PERSONAL SKILLS

Mother tongue Italian

| Other languages | UNDERSTANDING |         | SPEAKING           |                   | WRITING |
|-----------------|---------------|---------|--------------------|-------------------|---------|
|                 | Listening     | Reading | Spoken interaction | Spoken production |         |
| English         | B2            | B2      | B2                 | B2                | C1      |
| French          | C1            | C1      | C1                 | C1                | C1      |

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user  
[Common European Framework of Reference for Languages](#)

| Digital competences | SELF-ASSESSMENT        |                 |                  |                 |                 |
|---------------------|------------------------|-----------------|------------------|-----------------|-----------------|
|                     | Information Processing | Communication   | Content creation | Safety          | Problem solving |
|                     | Proficient user        | Proficient user | Proficient user  | Proficient user | Proficient user |

[Digital competences - Self-assessment grid](#)

## SELECTED PUBLICATIONS

- Pizzileo, S., Moretti, G., and S. Orlandini (2024), Flood plain inundation modeling with explicit description of land surface macrostructures, *Advances in Water Res.*, 188, 104713.
- Moretti, G., and S. Orlandini (2023), Thalweg and Ridge Network Extraction From Unaltered Topographic Data as a Basis for Terrain Partitioning, *JGR Earth Surface*, 128, e2022JF006943.
- Balistrocchi, M., G. Moretti, R. Ranzi, and S. Orlandini (2021), Failure Probability Analysis of Levees Affected by Mammal Bioerosion, *Water Resour. Res.*, 57, e2021WR030559.
- Moretti, G., and S. Orlandini (2018), Hydrography-Driven Coarsening of Grid Digital Elevation Models, *Water Resour. Res.*, 54(5), 3654–3672.
- Orlandini, S., G. Moretti, and J. D. Albertson (2015), Evidence of an emerging levee failure mechanism causing disastrous floods in Italy, *Water Resour. Res.*, 51(10), 7995–8011.
- Moretti, G., and S. Orlandini (2008), Automatic delineation of drainage basins from contour elevation data using skeleton construction techniques, *Water Resour. Res.*, 44(5), W05403.
- Orlandini, S., G. Moretti, M. Franchini, B. Aldighieri, and B. Testa (2003), Path-based methods for the determination of nondispersive drainage directions in grid-based digital elevation models, *Water Resour. Res.*, 39(6), 1144.

## STATEMENT AND SIGNATURE

**Statement** According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.

**Signature**