NextGen Nordic Geotechnics (NG2)

Thematic Area 3 (TA3)

NextGen Nordic Geotechnics (NG^2) is a Nordic early-career researcher network advancing geotechnical engineering innovations for climate resilience, sustainability, and digital transformation. The **Interdisciplinary Knowledge Hub (IKH)** hosts bi-monthly virtual seminars throughout the project period, first series focusing on **thematic area TA3: Digital and Data-driven Approaches.** TA3 is led by Monica Löfman and Milad Kowsari and it emphasizes on the integration of *digitalisation*, *artificial intelligence*, and *data-driven methods* in geotechnical practice.

Read more about NextGen Nordic Geotechnics (NG^2) at
https://www.ngi.no/en/projects/nextgen-nordic-geotechnics-ng2/

IKH#3 Seminar: AI/ML and automation in geotechnical engineering & seismic hazard

Date: Wednesday 9.12.2026

Time: EET 13:00-14:30 (UTC+2)

Where: Teams (link)

This seminar is intended for all the NG2 network partners and others interested in the research topics discussed in the event. The seminar will be recorded. Inquiries about the seminar can be sent to monica.lofman@aalto.fi.

Program:

13:00-13:05 Introduction / Monica Löfman, Aalto University

13:05-13:25 Machine Learning Basics / **Manuel Titos**, University of Granada (15 min + Q/A)

13:25-13:45 Beyond Observations: Physics-Based Ground Motion Simulations for Southwest Iceland / **Hamed Davari**, University of Iceland (15 min + Q/A)

13:45-13:50 Break

13:50-14:10 Application of Different Machine Learning Techniques to Ground Motion Prediction in the Southwest Iceland / **Milad Kowsari**, Icelandic Meteorological Office & University of Iceland (15 min + Q/A)

14:10-14:30 Discussion (chair: Monica Löfman)