



Workshop at GeoAI 2026, Ghent: 3 June 2026, afternoon

The dark side of GeoAI: mapping the risks and dangers of applying AI in the geo domain as well as potential countermeasures

Organisers:

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Goals and scope:

The goal of the workshop is to map out the risks and dangers of AI in the geo-domain, and to identify and map potential countermeasures for these risks. We plan to focus specifically on generative AI and machine learning as these AI technologies are already used in the geosciences and rapidly developing. Risks include, for example, using generated geodata for training, inferences or decisions, biases and hallucinations as well as the potential harms of geomedias that contain mis- and disinformation. Taking generated results at face value and ecological consequences of AI use constitute further risks.

We plan to create and discuss an initial set of risks, dangers and countermeasures at the workshop, working as a group to select a consistent subset to investigate more thoroughly at the workshop. Based on this initial investigation, we then plan to develop this into a more robust framework and (potentially) a journal paper afterwards. We consider this an essential endeavour for GeoAI that will help researchers and practitioners to develop useful and robust GeoAI tools and to responsibly create and use them.

Program:

14:00-14:30	welcome and scoping, lightning introductions
14:30-15:30	small group work: identifying risks and dangers
15:30-16:00	plenary discussion: reviewing results and potential mappings
16:00-16:30	coffee break
16:30-17:30	small group work: countermeasures
17:30-18:30	plenary discussion: reviewing results/potential mappings, next steps

Target audience:

The workshop is open for anyone at any stage of their career (student to senior researchers) working in or interested in the field of GeoAI as it will cover risks affecting the creation, use and

appropriation of GeoAI. Beyond geoscientist and computer scientists, we also think that the workshop could be of interest to ethicists, communication scientists and social scientists in general. We plan with about 20 participants to ensure a lively and thorough discussion.

Participation and schedule:

People interested in participating are asked to submit a simple text file containing a one-paragraph statement of interest (why they want to participate, what aspects they are particularly interested in, what expertise they bring to the discussion) and a suggested topic for the small group discussion in the first half of the workshop. Send your submission to scala24@uni-muenster.de with the subject line "Statement of interest: DarkSide Workshop". The organising committee will review all submissions based on the quality of the submission and the complementarity of potential participants. In case of a very large number of submissions, the selection will prioritise diversity and complementarity of participants.

Important dates:

13 March 2026	Deadline for submitting statement of interests
27 March 2026	Notification of acceptance
30 March 2026	Early registration deadline for the main conference

Please note:

Registration for the main conference and an accepted statement of interest are required for participating in the workshop.

If you have any further questions or any suggestions or comments, please contact Chris Kray (c.kray@uni-muenster.de). For the submission of statements of interest, please to email address listed above: scala@uni-muenster.de.