

NC Internship Programme 2026



NC Programme

National Capabilities for UK Challenges (NC-UK)

Project Title

Uncovering and minimising barriers to digital research infrastructure in environmental science

Supervisors

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Project Overview

Digital research infrastructure (DRI) developed under the NC-UK programme aims to support a variety of diverse stakeholders with wide-ranging digital skillsets for their environmental science insights and decisions. In Computer Science, it is known that without responsible design and inclusive participatory engagement through co-design processes, digital technologies can be designed with biases embedded that create barriers to specific individuals and groups in engaging with such technologies.

Some of these issues have begun to transpire through the NC-UK programme's DRI developments. Recognising this issue, the project will investigate and evaluate potential inclusivity and accessibility barriers for both digital research infrastructure (DRI) for environmental science, and the participatory engagement or co-design activities for developing the DRI. Drawing on lessons learned and best practices from the domains of digital and design, the internship will help shape the design and engagement mechanisms for NC-UK WP2 to improve inclusivity and accessibility moving forward.

The project will take a two-phase approach: 1) the candidate will first conduct a scoping review of the literature on digital inclusivity and accessibility within science and research, reading key publications and outputs from Human-Computer Interaction, Design and Computer Science, alongside closely relevant works from related disciplines such as the social and environmental

sciences; and 2) in uncovering known biases and barriers, the candidate will then evaluate DRI developments and engagement activities to offer directions in the programme for more inclusive and accessible outcomes surrounding DRI in environmental science. This will support the NC-UK programme's ambitions in enhancing EEDI (Equality, Equity, Inclusion and Diversity) in its community-driven outputs and initiatives.

Key tasks

Scoping review (Weeks 1–3)

- Carry out a high-level scoping review of recent literature across human–computer interaction, social science and environmental science.
- Identify barriers in digital technology and co-design activities.
- Select a focused EEDI theme based on existing knowledge and the intern's interests.

Building the evidence base (Weeks 3–4)

- Pull together best practices for designing digital technologies and understanding the social contexts around them.
- Explore inclusive engagement approaches for co-designing Digital Research Infrastructure (DRI).

Applying insights (Weeks 4–5)

- Review current DRI platforms in development and existing co-design mechanisms (e.g., *Community Conversations*).
- Assess them against barriers highlighted in the literature.
- Recommend adjustments aligned with EEDI best practice.

Sharing findings (Week 6)

- Deliver a presentation of key insights to the NC-UK WP2 team and other interested colleagues, including CEEDS (Centre of Excellence in Environmental Data Science — a UKCEH and Lancaster University collaboration).
- Ensure learning is fed back into the wider programme and ongoing DRI development.

Optional wider contribution

- Create a poster or work InProgress paper for a relevant conference or journal (e.g., CHI) to showcase progress and outcomes throughout the internship.

Expected Outcomes

- EEDI insights presentation - A short presentation outlining key barriers, opportunities and best practices for NC-UK DRI work, including a brief evaluation of WP2 platforms.

- Conference style output - A poster or work InProgress paper suitable for a venue like CHI.-style output - A poster or work-in-progress paper suitable for a venue like CHI.
- Reflective blog post - A brief, accessible write-up on the internship experience and main findings.
- Research skill development - Improved skills in presenting, collaborating and contributing to DRI work with UKCEH, NC-UK and Lancaster University.

The ideal candidate will have the following skills:

- Postgraduate level study - Currently doing a Masters or PhD, or graduated within six months of the internship start date (22 June 2026), in a relevant area such as Computer/Data Science, Environmental Data Science, Digital Technology or HCI.
- Experience with responsible innovation - Includes evaluating digital platforms, engagement approaches or similar.
- Ability to synthesise complex literature - Comfortable reviewing cross disciplinary research and turning it into clear, structured insights.-disciplinary research and turning it into clear, structured insights.
- Strong time management - Able to organise tasks, meet deadlines and work within iterative research processes.
- Enthusiasm for learning - Keen to develop professionally and contribute to a collaborative research culture.

Extra Information

The internship offers the applicant valuable experience working within a transdisciplinary research team spanning UKCEH and Lancaster University through CEEDS. They will develop skills in synthesising literature across digital, social, and environmental sciences, while producing tangible research outputs such as a poster or work-in-progress paper. The role also supports strong CV and career development by providing hands-on experience in responsible digital research infrastructure design, user-centred evaluation, and communicating findings effectively to both expert and non-expert audiences.

This internship aligns with UKCEH's inclusive and equitable hiring practices and our 2025-2030 EEDI objectives. We work to ensure early career opportunities are accessible to people from diverse backgrounds by improving processes, reducing structural barriers, and supporting flexible working opportunities. Our approaches are reviewed annually to assess representation and outcomes and adapt where needed. This internship contributes to these commitments by supporting inclusive behaviour, equitable career development, and broader diversity in DRI and environmental science. Embedding inclusive design and engagement principles into our DRI developments supports the UKCEH strategy, and our culture of trust, respect, and inclusion. career opportunities are accessible to people from diverse backgrounds by improving processes,

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