Principal Research Engineer
UK‑2026‑PRE
Call for Applications

[Topos Institute](#) is searching for a **Principal Research Engineer** to play a leadership role in advancing our portfolio of mathematical research software engineering projects, and in particular CatColab, our platform for formal, interoperable, conceptual modelling, based in **Oxford, UK**.

Summary

We are a non-profit research institute dedicated to realising a world where the systems that surround us benefit us all, so that society can better cooperate on critical issues — the climate crisis, pandemic responses, agricultural modelling, global access to education, and more — through interconnected systems that consider holistic impacts. We develop new tools for collective inquiry and modelling, enabled by a combination of novel foundational mathematics, open-source software engineering, and meaningful collaboration with domain specialists. Collaboration and discussion are fundamental to our work culture, so we deeply value gathering in person at the office.

- **Title:** Principal Research Engineer
- **Start date:** No later than the 1st of March, 2026
- **Location:** Oxford, UK
- **Employment type:** Full-time (1.0FTE)
- **Working Hours:** Standard working hours with required flexibility to accommodate differing time zones
- **Salary:** £72,000–84,000

Topos is committed to building a team with diverse perspectives and life experiences, so those with personal or professional backgrounds underrepresented at Topos are highly encouraged to apply.

Further information about Topos Institute, including our [Blog](#) and [YouTube](#) pages, can be found on our website: [topos.institute](#).

[Topos Research UK](#) is a charity start-up in the UK (inc. 2024) with affiliated charity start-up [Topos Institute](#) in the US (inc. 2019). For more information, see [topos.institute/legal](#).

About the position

Topos seeks to establish and sustainably fund the world leading research software engineering team capable of scoping, managing, and delivering polished open source prototypes of software systems designed with significant category theoretic (and general mathematical) sophistication. Clients will be both internal Topos projects and external government and industry research agencies.

These capabilities are a core part of our theory of change, pioneering a new public-benefit institution that vertically integrates foundational research, translational product-oriented engineering, and direct social impact work.

This Principal Research Engineer position will help lead the creation of this translational research and engineering function within Topos UK, starting from managing an initial, small team in direct project delivery, and with the potential for growth into a Topos-wide leadership and management role.

Responsibilities

The core responsibilities of this role are to:

- Work with clients (both internal and external) to define software project requirements, timelines, and delivery plans

- Manage a growing team of software engineers and research software engineers (initially 1-2 FTE research-inclined software engineers internal to Topos UK, and 1-2 external contractors experienced in production software engineering) across project delivery, HR, and budget/finance matters

- Serve as Principal Investigator on research grants and contracts (eg. from UK government funding agencies)

- Directly contribute to engineering work as necessary

- Attend to culture of care, community, and purpose within team and across Topos

At the more senior level, this role will:

- Develop new business opportunities, including:
    - sourcing new opportunities,
    - building a strong network of relationships, and
    - writing proposals

- Develop long term strategy for growing the translational research and engineering function within Topos, coordinating with (Principal) Research Scientists across Topos UK and US to ensure technical and strategic cohesion

About you

Work Experience

- PhD and strong track record of publications in category theory, type theory, and/or related research topics
- 3+ years industry software engineering experience
- Track record of managing teams to deliver production-grade software projects
- Experience working with clients to identify and update client requirements, and to manage client relationships
- Experience preparing budget forecasts and reviewing reports of expenses against budgets

Technical Skills

- Strong programming skills, preferably including experience with Rust, TypeScript, and/or Julia
- Proficiency with industry standards for version control (Git, GitHub)
- Experience with cloud infrastructure (e.g. AWS)

Leadership Qualities

- Collaborative, supportive management style with focus on team development
- Ability to communicate clearly and collaboratively, both internally and externally
- Creative problem-solving approach with strong analytical skills

Cultural Fit

- Intellectually curious with appreciation for technical research
- Mission-first orientation with commitment to public benefit; motivated by meaningful work that contributes to helping solve global-scale challenges
- Comfortable with complexity, ambiguity, and rapid change; sees challenges as opportunities for growth
- Committed to building inclusive, supportive team environments
- Ability to periodically travel to the head office in Berkeley, California, or other locations as needed
- Flexibility with working hours, to accommodate for collaboration across global time zones

There is evidence to suggest that women and people of color are less likely to apply for jobs unless they believe they meet every one of the qualifications as described in the job description. If this role speaks to you, we encourage you to apply, even if you don't believe you tick all the boxes.

Eligibility criteria

Topos will consider sponsoring a UK visa for an exceptional applicant. **Please include details of your visa requirements (if any) in your application** (e.g. in your cover letter).

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, or disability.

Us and you

We are dedicated to shaping the future of technology to ensure a more equitable and just world, and we believe that a technology that supports a healthy society can only be built by an organisation that supports its team members. As such, Topos is committed to ensuring that we clearly and compassionately negotiate your role and responsibilities while you're at Topos, and then ensuring that you have the support that you need to fulfill that role.

Topos UK offers benefits including private health and dental insurance, 30 days paid holiday (plus public holidays), and a variable pension plan.

Why Topos?

Exceptional Team. Collaborate with world-leading researchers and high calibre funding agencies.

Inclusive Environment. Be part of building a diverse team where different perspectives are valued and everyone can contribute their best work.

Meaningful Impact. Lead breakthrough research on humanity's most pressing challenges—from climate change to public health to collaborative open science.

Technical Innovation. Support the development of genuinely novel technologies that could transform how humanity approaches complex, collaborative decision-making.

Supportive Culture. Join a caring, inquiry-driven community that values both intellectual rigor and personal wellbeing, with a strong focus on in-person office culture but flexibility to support work-life balance.

Growth Opportunity. Shape a team poised for significant expansion and impact.

Application process

To apply for this position, please email **uk-2026-pre@topos.institute** with the subject line "**UK-2026-PRE application**" and two PDF attachments:

1. a copy of your CV; and
2. a cover letter **including the contact details for two references** who we can contact.

Your cover letter might describe your interest in the Topos Institute and this position, your professional experience, your future goals, your specific relevant experience, and your potential contribution to a diverse and inclusive environment at Topos. Please feel free also to convey any information about preferred names and pronouns.

Please note that we will **not** contact your references without first notifying you.

We will review applications on a rolling basis, but **the final deadline for application submissions is the 1st of March, 2026.**

If you have any questions about the application, or the role in general, please email **uk-2026-pre@topos.institute**.