# Software Engineer *or* Senior Software Engineer
## *Call for Applications (US)*

[Topos Institute](#) is hiring for a first full-time Software Engineer to develop [CatColab](#), our collaboration platform for formal, interoperable, conceptual modeling, based in our Berkeley, CA office.

## Summary

We are a non-profit, independent research institute dedicated to shaping technology for public benefit. We use cutting-edge mathematical research, especially category theory, to develop new computational tools that enable cooperation across difference, with a core strategic focus on reinventing the practice of transdisciplinary scientific modeling. Our technical team draws on training in mathematics, computer science, chemistry, philosophy, and more. Collaboration and discussion are fundamental to our work culture, so we deeply value gathering in person at the office.

- **Title:** Software Engineer *or* Senior Software Engineer
- **Start date:** From June 1
- **Location:** Berkeley, CA
- **Employment type:** Full-time (100% FTE)
- **Salary:** $100–125k or $115-140k (senior level)

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

## About the position

Now at an early alpha stage, [CatColab](#) is our first step at Topos toward building production-grade software intended for users without specialized mathematical training. CatColab is a web application with a novel category-theoretic core written in Rust, backed by a server also written in Rust. Its frontend, written in TypeScript/SolidJS, features real-time collaborative editing within a notebook-style interface.

We're looking to hire our first full-time software engineer onto the US CatColab team. We are open to hires at both intermediate and senior levels. This is a unique opportunity to shape the design and implementation of an [open source software](#) system that draws on cutting-edge research to support collective inquiry for the public benefit.

You do **not** need to know any category theory to be a good fit for this role (though an ideal candidate would have some familiarity with the subject). If you've worked on a technical, production-quality web app, ideally using Rust or TypeScript, and you're excited about CatColab, then we'd like to hear from you.

## Responsibilities

- Design, implement, test, and maintain software at the Topos Institute, in close collaboration with the research staff and in line with Topos Institute's scientific strategy and mission.

- Contribute to developing the CatColab platform, including frontend development in TypeScript and/or backend development in Rust. You might also contribute to the mathematical core, written in Rust, as your mathematical experience permits.

- Review other contributors' code in keeping with Topos' ambitious standards for readability, concision, and correctness.

# About you

- Have strong programming skills. You should almost certainly have experience in at least one of TypeScript and Rust.

- Communicate well and clearly about code, orally but especially in writing. You're used to documenting what you're thinking and what you're doing clearly, primarily in GitHub issues, PRs, and review comments, but also in meeting minutes and design documents.

- Have the initiative and flexibility to play a critical role on a small development team.

- Care about the broader impact of your work and are eager to participate in discussions around concrete ways our work can evolve to better serve others.

- Are excited to work in-person with a vibrant and cohesive larger team in Berkeley.

- Especially at the senior level, ideally, might have experiences like…

  - Implementing software systems that are elegant, robust, and maintainable
  - Configuring and maintaining SQL databases
  - Exposure to, or interest in, category theory and/or type theory
  - Doing research, or developing software in collaboration with researchers
  - Collaborating intensely on a long-term ambitious project on which no one team member has all the pieces of the puzzle.

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 US visas for a successful applicant. Please include details of your visa requirements (if any) in your application (e.g. in your cover letter).

Topos is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or status as a protected veteran.

## 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 its team members thrive in their work and home lives.

Topos offers generous benefits including medical, dental, and vision insurance (all premiums covered), 18 days paid vacation annually, 13 paid company holidays annually, and a 401(k) plan.

## Application process

To apply for this position, please email **CA-2025-SWE-1@topos.institute** with the subject line "**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.

If you have any questions about the application, or the role in general, please email **CA-2025-SWE-1@topos.institute**.