

CircuRead: Building a Signed Graph of Academic Reviews

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Why I Built CircuRead

In research, great ideas often start small, a scribbled equation, a hypothesis from an observation, or a speculative note to a mentor. But how do these ideas travel? How are they refined, reviewed, and—most importantly—credited?

CircuRead was born out of this question.

It's not a platform. It's not a journal. It's a protocol. A way to treat each academic idea as a first-class citizen in a versioned, signed, and traceable graph of reviews.

What is CircuRead?

CircuRead turns Git + GitHub into a distributed peer-review engine for idea notes. Instead of uploading to a central system, each researcher keeps a private repo. Every idea lives in a small directory with a `note.tex` and a `note.meta.yml` file that defines its routing and access.

- Going **upstream**? Use `circuread deliver` to send your note to mentors for review.
- **Reviewers** add LaTeX signatures, commit with GPG, and push back.
- **Fetching** brings those signed ideas back into your personal history.

All access is granted or revoked automatically based on YAML configurations. All reviews are cryptographically signed. All updates are transparent to the note's original author.

How It Works (In 60 Seconds)

Each time you submit a note, CircuRead checks who you want to send it to. If it's your first time sending a note to Dr. Bob, it'll create a lightweight GitHub exchange repository named `you__to__bob` under an organization like `circuread-xrepos`.

- Only you and Bob can see that repo.
- Only the note being reviewed gets pushed there.
- Once Bob signs it, you can pull his commit into your main repo.

This is repeated per reviewer. Notes can fan out. Feedback can flow down.

Why It Matters

CircuRead isn't just about Git. It's about **visibility and voice**. Every signature is verifiable. Every review is owned. And most importantly, **you keep the full history of your idea**—from first draft to last endorsement.

In traditional academia, your early-stage ideas disappear in private emails. In CircuRead, they get reviewed, signed, and recorded.

It's like turning GitHub into your academic notebook—with peer review baked in.

Project Link

You can find the full code, documentation, and sample workflows here:

<https://github.com/the-star-sea/CircuRead>

Try it with your advisor. Or set up a network for your research group. One line of config is all it takes to get started.

What's Next?

CircuRead is still evolving. Ideas on the roadmap include:

- Optional email and Discord alerts when you receive a new review.
- Workflow templates for teaching assistants to review student project notes.
- Public badge integration to highlight endorsed notes.

If you're curious about digital scholarship, reproducible science, or trustless collaboration—CircuRead is a playground.