

Pair Programming as Peer Mentorship

Building research software communities, one session at a time

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Researchers who code are often on their own

- Most learned by trial, error, and Googling
- They work solo on code no one else reads
- Mentorship, where it exists (which is rare!), is **hierarchical** — senior teaches junior, one direction

So how do peers actually learn *from each other*?

The usual framing

Pair programming is a **software development technique**.

Two people, one computer. A *driver* types; a *navigator* thinks ahead and asks questions. They switch regularly. True — but that framing undersells what it does for a *community*.

The reframe

Pair programming is
peer mentorship.

Why it works as mentorship

- **You bring your own code** — no prep, no need to understand someone else's project first
- **You're immediately useful** to your partner, whatever your level
- **It flows both ways** — the “junior” asks the questions that expose hidden assumptions; the “senior” learns by explaining

- **Low stakes** — messy, half-finished code is expected and welcome

It fits research especially well

- **Cross-disciplinary** — a genomics analyst and a modeller use different tools; pairing surfaces things neither knew
- **Cross-career-stage** — mentorship without the title or the awkward ask
- **Builds networks** — you leave knowing someone you can message next week

What I'm doing — SSI Fellowship

Running **low-barrier pairing sessions** for researchers who code.

- No training, no preparation — bring real work, finished or not
 - Rotating pairs across labs, tools, and experience levels
 - A repeatable format others can pick up and run
- Materials, facilitator guide, and format are all open.*

Try it yourself!

- **Try it** — pair on the *start* of your next project, not just when stuck
- **Find a buddy**, don't wait for an organised event
- **Run a session** — the format is open, come take it

Thank you

Pair Programming as Peer Mentorship

Materials & format:

github.com/h-mateus/pair-programming-workshop

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Part of an SSI Fellowship project.

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