

Respect + Understanding

Common Language

It's important to remember that different kinds of people and roles make Scientific & Research OSS tools open, accessible, stable and sustainable as well as the three role types covered in this Zine.

These different roles can be community managers, students, project managers, developer relations, labs, institutions, open source program offices and funders all ensure that the wider ecosystem of Science and Research OSS is operating as well as it can.

“The projects that I'm on is really a collection of different people that all have somewhat different goals and different incentives.”

Let's work on

Collaborating closely and clarifying expectations: projects who introduce a design role should plan for close collaborative work between roles, including time and activities to clarify mutual expectations and needs.

6

OSS Developer



Role and responsibilities

- Code contributions and maintaining the OSS
- Documentation, support requests comms
- Community and contributor onboarding

Tools

- Coding: Terminal, coding apps (VS Code etc.), Python.
- Documentation: Notes/docs apps, markdown, demos
- Support: Github, emails, chats (matrix etc.), forums community calls, conference meet ups.

They care about the stability and flexibility of infrastructure and code. To ensure more contributions, code and docs make sense and users support requests are responded to as quickly as possible.

What we heard from them

“To me, design means structuring your software in a way that others and yourself future self can understand and build on.”

“I'm an r&d engineer, a developer, an individual contributor. I have responsibility as a point of contact for commercial customers.”

5

OS+SR Researcher



Role and responsibilities

- Scientific and Research purposes are prioritised
- Citations, reproducibility and peer reviewing
- Docs, some coding and training/workshops

Tools

- Science: Paper writing and speaking, citation tech.
- Coding: Jupyter Notebooks, R, Data science and cleaning, Python packages.
- Project and community management: Github, conferences, workshops, teaching.

They care about Science and Research being open, accessible and understandable for the long term future and their own science and research purpose and career being sustainable and stable.

What we heard from them

“Contribution means people working with me on the code in collaboration. I rarely work by myself. We are people with big picture ideas and we may be less tech-savvy but still have stake.”

4

OSS Designer



Role and responsibilities

- Non-code contributions
- Design the user experience and the user interface
- Community engagement as user research

Tools

- Design: Figma, Penpot, Adobe, written docs
- Research: Community calls, Forums, Github Issues, usability test interviews.
- Project management: Github, Notes/docs apps

They care about the end-user experience, for example: how consistent the user interface is, how easy it is to use software. And inclusivity of users and accessibility.

What we heard from them

“I don't have any formally assigned role by the project. But I'm definitely in the design sphere.”

“I often get asked "what do you do?" - I've never worked with a designer before" from the OSS Science & Research project team members.”

3

The zine you're holding is a part of USER – a research initiative that concerns how ‘**design**’ and ‘**usability**’ are broadly thought about and practiced within Scientific & Research open-source software projects and teams. Learn more about the project:



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USER

Usable Software Ecosystem Research



An initiative by Superbloom Design
Funded by the Sloan Foundation

The Usable Software Ecosystem Research (USER) project was initiated by Superbloom Design and funded by the Sloan Foundation. It explores how Scientific & Research open-source software teams understand, consider, and undertake usability and design opportunities in their projects.

Through a variety of research methods such as literature reviews, semi-structured interviews, surveys, and ecosystem mapping, the research aims to obtain a better understanding of:

- 1 How norms in academic, science, and/or open-source working environments affect the choices teams make around their users and different kinds of design interventions.
- 2 How team dynamics and trust affects those choices.
- 3 What teams would need to be interested in or able to prioritize usability and design in their work.

In this zine, we'll share with you an overview of how different roles define themselves in Science & Research OSS and how they attempt to understand each other better.

1

Getting to know each other

>> Designers, OSS S&R Developers and Researchers

From December 2022 to February 2023, we spoke to 24 research participants who are maintainers, developers, designers, scientists, researchers, funders, Open Source Program Offices and stakeholders – all involved with creating and maintaining Scientific & Research OSS.

One of the questions we asked was “**Imagine a designer joined your team. What do you think this would be like?**” — Here is what we've learned:

Many S&R OSS and Designers struggled with achieving a mutual understanding and respect for each other's needs from the project. Designers wished for a “common language” which they tried to work towards by explaining terminology and educating team members. However, even shared terms did not necessarily translate into a lived design practice when working on the software.

2