Research Software, Citation, and FAIR at FORCE2024

Daniel S. Katz

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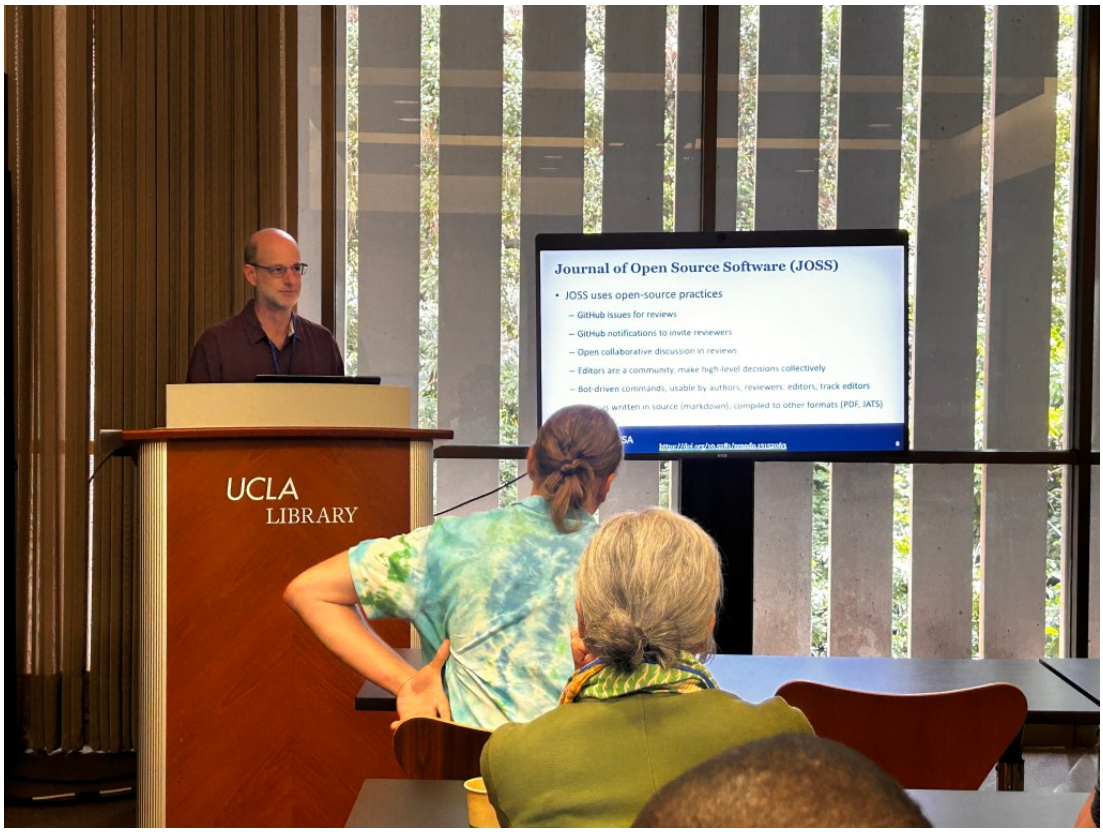

Dan speaking about JOSS at FORCE2024. (photo credit: Scott Edmunds)

I recently attended the FORCE2024 conference at UCLA. I'm a member of the board of directors of FORCE11, the parent organization for the conference, and the co-located FORCE11 Scholarly Communications Institute (FSCI), which I was not able to attend this year but have taught at in the past. This blog post is intended to share some of my experiences, and perhaps inspire others to participate in the conference (and FSCI) and the community in future years, as well as in research software activities.

The main reasons I went were to present a talk about the Journal of Open Source Software, to meet colleagues I haven't seen recently, and to learn about what else is happening in the scholarly communications community.

My talk about JOSS (see the slides) in a fairly crowded room went well, other than that I talked a bit longer than I intended to, and didn't leave time for more than a couple of questions. A number of people did come up to me afterwards with comments and questions, which was nice. The comments were generally appreciative about the innovative things JOSS is doing, and the fact that it is scaling diamond open access via a volunteer organization, and the questions were about details or how to use some of what we have developed. It's clear that FORCE11 attendees are open to new models for peer-review and publishing, though unfortunately, this still can't be said for organizational gatekeepers such as Clarivate / Web of Science and Elsevier / Scopus, as I highlighted in slide 22 of the talk.

While preparing the talk, I re-looked at the Principles of Open Scholarly Infrastructure (POSI). We did a self-evaluation of JOSS in Feb. 2021, and so I reviewed that, and also looked at the new version of POSI from Nov. 2023, which I helped develop as part of the POSI Posse. On the one hand, I think our original self-assessment still holds, though I might be a bit more generous today than I was in 2021. On the other hand, I realized that much of POSI's sustainability focuses on financial resources, and as an all-volunteer organization, JOSS's main issues with sustainability are around volunteers and their time. There are similarities between this and financial sustainability, and even some overlaps, such as the need for succession planning for people in key roles, whether they are employees or volunteers.

This ties to another part of FORCE2024 program, a plenary talk by Geoffrey Bilder on POSI and, as he says in his abstract, the "limitations and the risks associated with the self-auditing culture that has developed around them [the principles]. I will also discuss recent developments in the community that threaten to slow or even roll back the adoption of open scholarly infrastructure." I am a little disappointed, however, that Geoffrey didn't follow through on the final part of his abstract, to "call out a few critical infrastructure organizations that appear reluctant to adopt the Principles of Open Scholarly Infrastructure." This talk was followed by a panel with the original POSI authors, Geoffrey, Jennifer Lin, and Cameron Neylon.

I will try to work with the POSI posse to see if there are changes needed for organizations that are more volunteer-based, such as thinking about the pool of volunteers as a garden that needs to be watered, and keystone volunteers on whom an organization relies. This might be useful for other organizations, as well, with FORCE11 being one example.

Finally, I was really encouraged to hear a talk from Bhavesh Patel from the California Medical Innovations Institute (CalMI2) about work he has been leading to build on FAIR principles, including those for research software (FAIR4RS), developing tools and guidance that biomedical researchers can use to make the software FAIR (and also citable.) Bhavesh also led a paper about this work: "Making Biomedical Research Software FAIR: Actionable Step-by-step Guidelines with a User-support Tool." While this is in the context of biomedical research software, Bhavesh said that 95% of it is generalizable to other fields.

Under ReSA, I've just started leading a 2-year review of the FAIR for Research Software principles, and this work should help us ensure that we consider any needed changes in the principles or documentation around them. If you are interested in FAIR4RS, keep an eye out for news on this, which will likely start with a survey in the next few months.

Coincidentally, while at FORCE2024, I was asked to join a proposal for a workshop to improve tools for research software citation in another field. I'm quite happy to see different groups pushing the work I co-led in both FAIR4RS and software citation forward. I'm hoping that we can perhaps create a new working group (or interest group) in a combination of FORCE11 and ReSA and RDA to bring this together, hopefully led by some of the new people who were not involved in the original work but have found it and want to use it. Overall, this has made me feel very positive about the future of research software citation and FAIRness.

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