ReSA Newsletter: July 2020

This month's news includes:

- FAIR for Research Software update
- Recommendations on software sharing for policy makers, funders, publishers and researchers
- Request for Proposals for Critical Digital Research Infrastructure by Ford Foundation and Sloan Foundation
- OECD report on developing digital skills in the research sector
- US Research Software Engineer Association July newsletter items of interest

FAIR for Research Software update

The FAIR for Research Software Working Group (FAIR4RS WG) has now formed four subgroups to advance the first aim of the WG, to define FAIR guiding principles for research software, and how to join these. The four subgroups will work from July - September 2020 on the following tasks:

1. "A fresh look at FAIR for Research Software" will examine the FAIR principles in the context of research software from scratch, not based on pre-existing work. Lead: Daniel S. Katz
2. FAIR work in other contexts will examine efforts to apply FAIR principles to different forms including workflows, notebooks and training material, to provide insights for the definition and implementation of FAIR principles for research software. Lead: Mateusz Kuzak
3. Definition of research software will review existing definitions of research software and will specify the scope for the WG outputs. Lead: Morane Gruenpeter
4. Review of new research related to FAIR Software will review new research around FAIR software that has come out since the release of the Towards FAIR principles for research software paper in August 2019. Lead: Neil Chue Hong

The links above to each subgroup also contain details on how to join each subgroup, or the overarching FAIR4WG can be joined here (after joining RDA, which is free). Further details are also available in the materials from two FAIR4RS WG webinars held on 29/30 June:

- Recording of session 1, chaired by Daniel S. Katz.
- Recording of session 2, chaired by Fotis Psomopolous (a repeat of session 1)
- Webinar slides
- Webinar collaborative notes

Suggestions of any activity/conference/workshop where this initiative could/should be presented are also welcome.

Recommendations on software sharing for policy makers, funders, publishers and researchers

Recommendations on software sharing are included in the final version of the RDA COVID-19 Recommendations and Guidelines for Data Sharing, published on 30 June 2020.

The software section puts forward some key practices for the development and (re)use of research software, as doing so facilitates sharing and accelerates the production of results in response to the COVID-19 pandemic. This includes recommendations that aim to enable

relatively small points of improvement across all aspects of software that will allow its swift (re)use, enabling the accelerated and reproducible research needed during this crisis.

Community news

There's a new Request for Proposals (RFP) for Critical Digital Research Infrastructure by **Ford Foundation and Sloan Foundation, as well as Mozilla and Open Society Foundations**. This RFP invites proposals to further study the maintenance of digital infrastructure, in areas such as:

- What makes digital infrastructure "critical"? How should support for digital infrastructure projects be prioritized, and by whom? How can the value of digital infrastructure be quantified through economic, social, security, or other measures?
- How might we assess the reliability of digital infrastructure? What incentives and supports might foster more robust auditing and maintenance?
- What is the role that companies and other private institutions should play in maintaining a stable ecosystem of open source technology, and with what kinds of accountability mechanisms? What are the trade-offs between private sector, government, university, civil society, and/or volunteer maintenance of digital infrastructure?
- How can communities that maintain digital infrastructure best be sustained? What are the unique challenges of diversity, motivation, and health for such open projects, and what formal and informal policies are needed to improve them?
- Are certain skills or expertise missing or weak in the field of digital infrastructure, such as management experience or succession planning? How can the skills of individual maintainers, developers and advocates of open source technology be strengthened?
- How are systemic inequalities like racism, sexism, ableism, and/or xenophobia encoded in digital infrastructure, and how might that encoding be dismantled? How might the diverse local and global communities reliant on this infrastructure exercise power and more actively shape its creation and maintenance?
- What are the policy and regulatory considerations for the long-term sustainability of digital infrastructure? What kinds of capacity are needed, for example in government, philanthropy, or civil society, to ensure long-term development of digital infrastructure in the public interest?

OECD has published "Building digital workforce capacity and skills for data-intensive science", a report examining the skills requirements for data-intensive research conducted in the public sector. The expert group for this work was chaired by ReSA Director, Michelle Barker. This report was commissioned by the OECD Global Science Forum to identify the skills needed for data intensive science; the challenges for building sustainable capacity as these needs evolve; and the policy actions that can be taken by different actors to address these needs. The report includes policy recommendations for various actors, such as a recommendation that research organisations support the development of professional communities in emerging roles such as data stewards and RSEs, and for trainers and leaders of digital skills initiatives. It also provides good practice examples to support these recommendations, including case studies from the Society of Research Software Engineering and Software Sustainability Institute.

Check out the **US Research Software Engineer Associatio**n (US-RSE) July newsletter for items of interest such as:

- US-RSE Governance & Elections
- RSE Community Workshop at PEARC20

- Call for Submissions: RSE-HPC-2020 Workshop at SC20
- Exchanging Best Practices with other RSEs
- CZI call for Essential Open Source Software for Science proposals

If you'd like to suggest items for inclusion in ReSA News, please send them to info@researchsoft.org. To receive ReSA newsletters join the ReSA google group by sending a blank email to research-software-alliance+subscribe@googlegroups.com

ReSA's vision is that research software be recognised and valued as a fundamental and vital component of research worldwide. The ReSA mission is to bring research software communities together to collaborate on the advancement of research software.