Synergies between Research Software Engineers and Data Stewards

<u>Research software engineers</u> and <u>data stewards</u> from different groups collaborated to explore the overlap between the roles of a research software engineer (RSE) and a data steward (DS).

Conclusion: there is significant overlap.

Initially, there was a perception that data stewards might be less technically oriented. However, a self-identified DS+RSE suggested that this perception could be biased, given the larger RSE presence compared to DS. In reality, data stewards often need strong technical skills as well.

The conversation is ongoing...

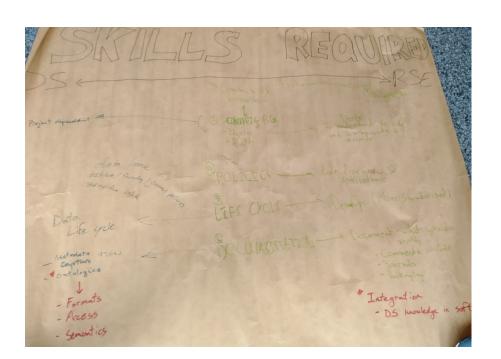
Below, we present the different topics examined along a spectrum from DS to RSE. For clarity, the images have been digitally recreated, and the raw data (the original posters manually created by participants) are included below.

Day-to-Day Tasks

DS ←			→ RSE
	Promoting FAIR		Requirements engineering
Data curation			Consulting
Compliance			Setting priorities
	Data policy		Implementation
Education		Giving training	Platform engineering
Publish data			Project Management
	Data governance		Expectation management



•	Communication with researchers	Software RSE
Project dependent	← Scientific background→	Deeper to understand the code and communicate with researchers
Data license Institute, funding, journal policies Sensitive data	←Policies→	Code licensing and distribution
Data lifecycle Metadata capture JSON Ontologies (formats, access, semantics)	←Life Cycle→ ←Documentation→	DevOps (more standardized) Document what you do mostly - Comments in code - Journals - Packaging *Integration (DS knowledge in soft)



How does your work support your organization's goals?

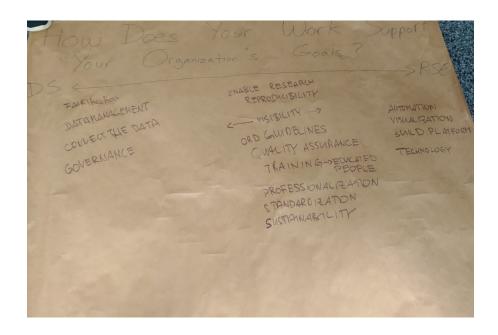
DS

FAIRification
Data Management
Connect the data
Governance

Enable research reproducibility
Visibility
Open Research Data guidelines
Quality assurance
Training – educate people
Professionalization
Standardization
Sustainability

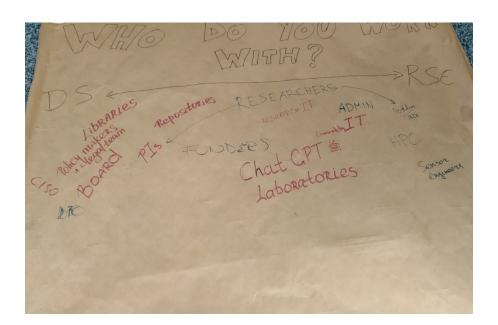
Automation Visualization Build platform Technology

► RSE



Who do you work with?

DS 🗲 **RSE** Libraries HPC Policy makers and legal team Sensor engineers Board Commodity IT CISO DPO Postdocs, PhDs PIs ← Researchers → Funders Research IT Admin ChatGPT Laboratories



How can the Research Software Engineering and Data Stewardship Network communities help you?

DS ← RSE

Help communicate with decision markers/awareness
Formalize career progression and definitions
Provide central info point for useful resources
Platform for recognized professional exchanges/social events
Support for networking
Mutual recognition
Guidelines/best practices
Mentorship

