

Research Software and the people behind it

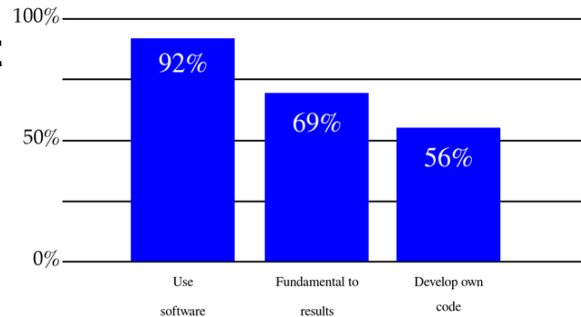
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Computing and Data Center

About me



“It's impossible to conduct research without software, say 7 out of 10 UK researchers”



**BETTER
SOFTWARE
BETTER
RESEARCH**

- Helmholtz Task group Research Software:
 - Muster-Richtlinie Nachhaltige Forschungssoftware an den Helmholtz-Zentren, <https://doi.org/10.2312/os.helmholtz.007> / <https://doi.org/10.48440/os.helmholtz.041>
 - Alliance Working Group: Recommendations on the development, use and provision of Research Software <https://doi.org/10.5281/zenodo.1172988>
- Helmholtz:
 - HIFIS www.hifis.net
 - Helmholtz Network für Research Software Engineering

The Reproducibility Guru

- Learns lots of software tools in order to make his research reproducible



The Researcher

- Needs analysis scripts (or other software skills) for her research
- Learns what she needs

The Software Person

- Is hired to work on software for a research project



“Software is 95% human and only 5% code” *



The Geek

- Writes software as part of her research project
- Would like to code more, but needs to think about her career and write papers

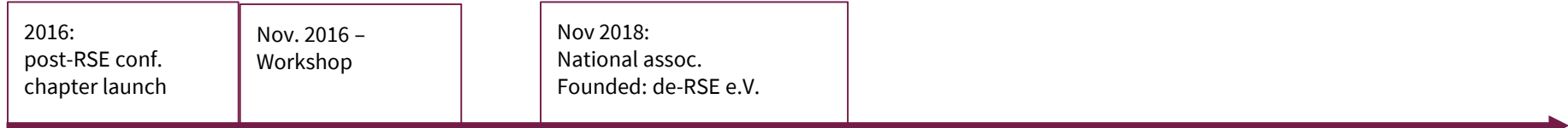


The Go-to Person in case if problems

- Knows how to solve all kinds of computer problems
- Is hired to work on other things but is kind enough to help because he likes it

* Eric Albers, CCC2019, <https://media.ccc.de/v/thms-49-ber-die-nachhaltigkeit-von-software>
pictures © H. Seibold, S. Janosch, OSD2019

A short history of de-RSE



Launching the German RSE chapter “de-RSE”

Posted by s.hettrick on 19 January 2017 - 9:09am



Founders of the de-RSE chapter

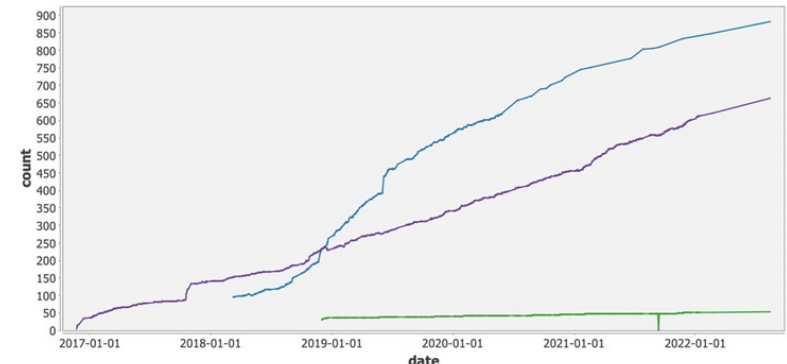
By Martin Hammitzsch, GFZ Potsdam, Stephan Janosch, MPI CBG & Frank Loeffler, Louisiana State University

The days following the first conference of Research Software Engineers (RSEs) saw the launch of a German RSE chapter *de-RSE*. It was formed by RSEs working inside and outside Germany, and it will further the shared objectives of RSEs and become the collective mouthpiece for RSEs within the German science.



B. Fritzsch – HiRSE 15.09.2022

- Non-profit status
- Generic board structure
- ~50 members
- Mailing list - 650 subscribers
- Chat





- Representation of interest for RSEs
- Mapping and linking German RSE community
 - surveying german RSE landscape
 - networking
- International collaborations




Some previous work



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 VOR 10 MONATEN
 OWNED THIS NOTE

1370 views 

de-RSE - Gesellschaft für F...


- Inhaltsverzeichnis
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- Anwesende
- Kommentare

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de-RSE - Gesellschaft für Forschungssoftware
begeht den 1. *International RSE Day* am 14.
Oktober 2021



Nationale
Forschungsdaten
Infrastruktur



rSE22 Track



de RSE | SOCIETY FOR RESEARCH SOFTWARE

POSITION PAPER #001 (06 May 2020)

An Environment for Sustainable Research Software in Germany and Beyond: Current State, Open Challenges, and Call for Action

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Abstract

Research software has become a central asset in academic research. It optimizes existing and enables new research methods, implements and embeds research knowledge, and constitutes an essential research product in itself. Research software must be sustainable in order to understand, replicate, reproduce, and build upon existing research or conduct new research effectively. In other words, software must be available, discoverable, usable, and adaptable to new needs, both now and in the future. Research software therefore requires an environment that supports sustainability. Hence, a change is needed in the way research software development and maintenance are currently motivated, incentivized, funded, structurally and infrastructurally supported, and legally treated. Failing to do so will threaten the quality and stability of research. In this paper, we identify challenges for research software sustainability in Germany and beyond, in terms of motivation, selection, research software engineering personnel, funding, infrastructure, and legal aspects. Besides researchers, we specifically address political and academic decision-makers to increase awareness of the importance and needs of sustainable research software practices. In particular, we recommend strategies and measures to create an environment for sustainable research software, with the ultimate goal to ensure that software research is valid, reproducible and sustainable, and that software is recognized as a first class citizen in research. This paper is the outcome of six workshops run in Germany in 2019, at HLRSE – the first International Conference of Research Software Engineers in Germany – and a dedicated DFG-supported follow-up workshop in Berlin.

Key words: Sustainable Software Development; Academic Software; Software Infrastructure; Software Training; Software Licensing; Research Software

arXiv:2005.01469v2 [cs.GL] 5 May 2020

Process established:

- Initial phase – call for contribution
- Review phase
- Decision phase

Topic areas:

- Motivation (for sustainable software)
- Selection processes
- **RSEs**
- Funding
- Infrastructure
- Legal aspects

<https://doi.org/10.26888/f1000research.23224.1>



- 1. Prize: L. Heumos et al. „Best Practice Programming Templates with Cookietemple“
- 2. Prize: S. Druskat, „Das Citation File Format: Forschungssoftware zitierbar machen“
- 3. Prize: J. Linxweiler, „SURESOFT: Towards Sustainable Research Software“
- 3. Prize: B. Fuchs, „ Programmieren und Mehr: Erfahrungen mit der Entstehung von research software engineering “
- Special Prize: J. Hagenberg et al, „ Der Codeclub am MPI für Psychiatrie“

- 13.10.2022 – 2nd International Day of Research Software
 - <https://github.com/DE-RSE/projekte/issues/11>
- rSE23: co-located with SW Engineering conference 20.-21.02 2023 in Paderborn
- unRSE 2023 Jena



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Package of Measures to Support a Shift in the Culture of Research Assessment

DFG changes proposal forms and introduces mandatory CV template / The aim is to support a shift in the culture of research assessment / Improvement of equal opportunity practices

- Further information to be active in RSE movement: <https://de-rse.org/en/join.html>
 - Mailinglist: liste@de-RSE.org
 - Chat: <https://chat.gwdg.de/channel/derse/>
 - Monthly community Call: <https://ag-openscience.de/public-call/>
 - Next call: 05.10.2022, 11:00
 - Twitter: @RSE_de
- Member of de-RSE
 - <https://de-rse.org/en/association.html>
- Mail: vorstand@de-rse.org

Thank you for your attention!