A German study about Research Software Engineers (RSEs)
The people writing software for Science

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Brief History of RSE ...

- Back to 2010 The Software Sustainability Institute (SSI, UK) run a study

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

  https://www.software.ac.uk/blog/2014-12-04-its-impossible-conduct-research-without-software-say-7-out-10-uk-researchers
Who writes code / develops software?

- There are plenty of researchers who write really good code ...

- Back to 2012 there has been a Collaborations Workshop (#CollabW12):
  "Developing the profession of a scientific software engineer and the career track of software developers in academia"  -- James Hetherington
What is the name for these people?

- jobs.ac.uk
  10,000 jobs assessed
  ~400 related to software development
  4%
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Research Software Engineers (RSEs)
Research Software Engineer (RSE)

- Back to 2013 growth of network
  - UKRSE Association
  - Since 2013 birth of Research Software Groups
    - University of Bristol, Culham Centre for Fusion Energy, Diamond, Imperial, King’s College London, LSE, University of Manchester, University of Oxford, University of Sheffield, Software Sustainability Institute, University of Southampton, UCL
- Back to 2016 1st Conference of Research Software Engineers #RSE16
  - Since 2016 birth of national RSE chapters

Martin Hammitzsch
@mrthammtz

The #RSE17 international workshop involved people from UK, NO, CA, DE, NL, LT, AU, and NZ ... Awesome!

2:36 PM - 8 Sep 2017
The German RSE chapter de-RSE

- #RSE16, Sep 2016 in Manchester
- Website, Slack and mailing list up by end of Sep 2016
- Defined objectives and activities
- Grew network
- Started community calls
- Raised awareness

More info
https://www.software.ac.uk/blog/2017-01-19-launching-german-rse-chapter-de-rse
What do we know about RSEs?

- UK Research Software Survey in 2014
  http://doi.org/10.5281/zenodo.14809
- RSE surveys were started
  - First results based on 2016 UK survey
    http://doi.org/10.5281/zenodo.495360
- Surveys spread over the globe
  - UK
  - Germany
  - USA
  - South Africa
  - Netherlands
  - …

We need your help with the @SoftwareSaved and #deRSE survey on research software and the people writing scientific software for Germany. Please complete the survey and spread the word:
softwaresaved.limequery.com/661559
A German study about RSEs

- Started in October, ends in December 2017
  https://softwaresaved.limequery.com/661559

- 300 valuable responses so far

- Intermediate results ...
Language

Start language [PERCENTAGE]

- de-internal (90%)
- ü (10%)

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Qualification

What is the highest qualification you have obtained? [PERCENTAGE]

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Subject of highest qualification

In which subject is your highest academic qualification?

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Discipline of work

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Code usage

Who uses the code that you write? (1)

0  Mostly me
1  Mostly me
2  Mostly me
3  Mostly others
4  Mostly others
5  Mostly others

Percentages:

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Professional developers

Do you consider yourself a professional software developer? [PERCENTAGE]
Experience

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Coding and non-coding activities
Other activities

In an average month, how much time do you spend on Other activities:

- 17.0%
- 31.33%
- 22.33%
- 11.0%
- 10.33%

In an average month, how much time do you spend on Teaching:

- 53.0%
- 27.67%
- 10.0%

In an average month, how much time do you spend on Management:

- 15.67%
- 34.0%
- 20.33%
- 9.67%
- 7.67%

In an average month, how much time do you spend on Research:

- 11.0%
- 16.0%
- 18.33%
- 12.67%
- 11.0%
- 8.33%
- 7.67%
- 6.67%

In an average month, how much time do you spend on software development:

- 6.33%
- 19.33%
- 12.0%
- 11.0%
- 14.33%
- 17.67%
- 11.33%
Full time work

Do you work full time or part time [PERCENTAGE]

<table>
<thead>
<tr>
<th></th>
<th>Full Time</th>
<th>Part Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>70</td>
<td>20</td>
</tr>
</tbody>
</table>

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What type of contract are you employed on? [PERCENTAGE]
Official job title
Also known as
Other questions

- Rank the following factors dependent on how strongly they influenced your decision to accept your current position
- Do you always work with the same researcher(s), or do you regularly change the researcher(s) you work with?
- Do you work for a Research Software Group?
- Has your software contributed to research that has been published in a journal or at a conference? How are you acknowledged?
- How many software projects are you currently involved in?
- How many software developers typically work on your projects?
- In general, what sort of testing do you conduct on your software?
- What is the bus factor of your most important software project?
- … and many, many more
Spread the word ... 

- ... and participate!

- Results / data will be released under CC BY-NC

- Data enables further analysis, e.g. per organisation

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