



# A Short\* History of Research Software Engineers in the UK

\*and probably incomplete

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# Pre-history

- Lots of Software Engineers hiding as
  - Post Docs and Research Associates
    - The person in the lab who can code
    - Writing code not papers
      - Falling foul of publish or perish
  - HPC or research group admin
- Example: Me
  - 2003: RA, RealityGrid
    - High visibility outputs: Papers, software, awards
    - I was cut out of one paper even though the work would not have happened without me
  - 2005: RA, Northwest Grid
    - Low visibility, infrastructure, thankless
    - At least one Nature paper published thanks to the infrastructure – no acknowledgement
  - 2007: RA, RealityGrid/e-Science follow on projects
    - More papers, software, awards
  - 2010: RA/Software Engineer, myGrid Team
    - More software, less papers
  - Present: Research Software Engineering Manager

# SSI Collaborations Workshop 2012

- Call to arms
  - How do we recognise the research contribution of people who
    - Write code not papers
    - Are not purely researchers
- Multiple discussion sessions (*ad nauseam*)
  - Ian Bush, Robert Haines, James Hetherington, Simon Hettrick, Ilian Todorov
- We needed a name
  - ~~Academic Software Engineers~~
  - Research Software Engineers
- We needed to unionise
  - UK Community of Research Software Engineers (UKRSE)
  - <http://www.rse.ac.uk/>
- SSI RSE policy campaign
  - Simon Hettrick

# The Craftsperson and the Scholar



- James Hetherington
  - <http://www.software.ac.uk/blog/2012-11-09-craftsperson-and-scholar>

# Research Software Engineers (2012)

- Not independent researchers
  - No personal research agenda
- Facilitative, supportive, and collaborative
  - Part of the academic community
  - Deep engagement with research groups
  - Understand, study, and be part of group research activities
  - Can read and understand the papers
- Sustainable and long term
  - Institutional memory
  - Continuity, stability, maintenance

# 2012 – present

- 2012: UCL, Research IT Services
  - Research Software Development Team. Lead: James Hetherington
- 2014: University of Manchester, Research IT
  - Research Software Engineering Team. Lead: Robert Haines
- 2015: University of Cambridge, University Information Services
  - Research Software Engineering Team. Lead: Filippo Spiga
- 2015: University of Southampton, Web and Internet Science Group
  - Research Software Group. Leads: Simon Hettrick, John Robinson
- 2015: EPSRC RSE Fellowships
  - Louise Brown, Ian Bush, Mike Croucher, Oliver Henrich, Chris Richardson, Paul Richmond, Christopher Woods
- 2015: EPSRC RSE Network Grant
  - Simon Hettrick; Alys Brett, Mike Croucher, Robert Haines, James Hetherington, Mark Stillwell
- 2016: University of Sheffield
  - Research Software Engineering Group. Leads: Mike Croucher, Paul Richmond
- 2016: RSE Conference
  - Manchester, UK. Chair: Robert Haines

# Current environment

- Challenges

- The status of RSEs is not consistent across
  - Funding bodies
  - Institutions
- The research system does not
  - Measure and incentivise RSEs correctly
  - Integrate RSEs within Higher Educational Institutions
    - Significant local effort required
  - Support institutional innovation in this area

- Positives

- People *want* to be RSEs
  - 54 applications for a recent (senior) post in Manchester
  - Lots of interest from current PhD students and PDRAs