

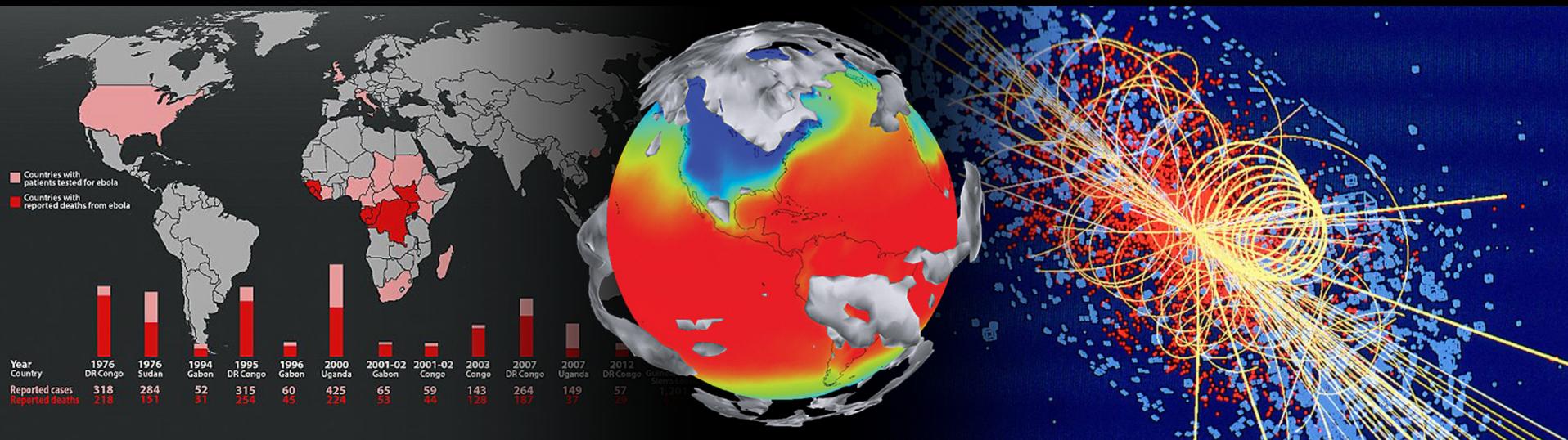
Software... and the people who create it

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Software
Sustainability
Institute

World-leading research relies on software



"Today there are very few science areas left which do not rely on IT and thus software for the majority of their research work. More importantly key scientific advances in experimental and observational science would have been impossible without better software."

*Kersten Kleese van Dam
Pacific Northwestern National Laboratory
via change.org campaign*

"Scientific discovery and innovation are advancing along fundamentally new pathways opened by development of increasingly sophisticated software. Software is an integral enabler of computation, experiment and theory, and directly responsible for increased scientific productivity and enhancement of researchers' capabilities."

*Dan Katz
SI2 Program Director, National Science Foundation*

Software Sustainability Institute



Edinburgh



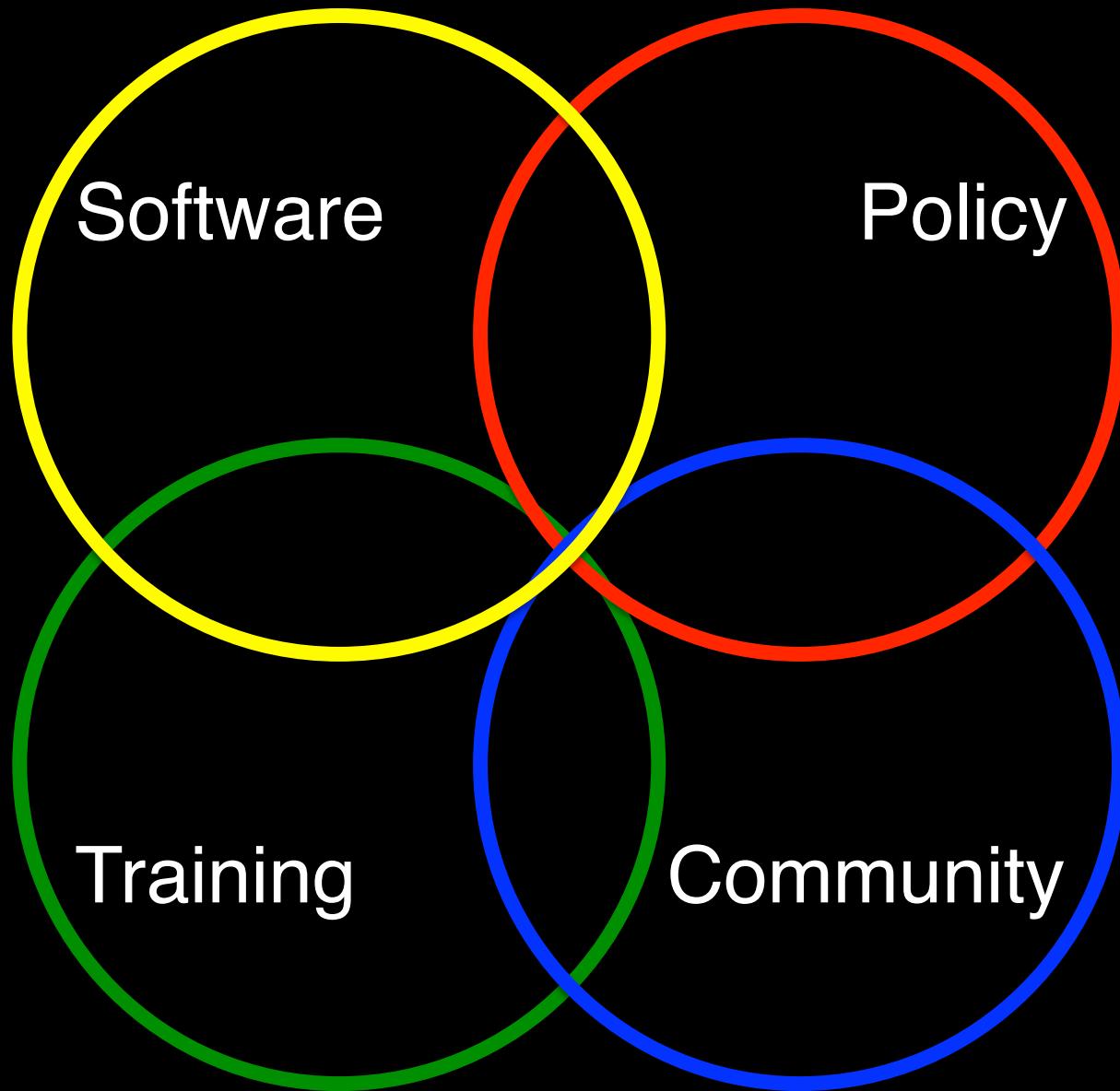
Manchester



Oxford



Southampton



How important is software?

Research software

noun \ri'sə:tʃ'swef(t)wε:

Software that is used to generate, process or analyse results that you intend to appear in a publication.

Research software can be anything from a few lines of code written by yourself, to a professionally developed software package.

Software that does not generate, process or analyse results - such as word processing software, or the use of a web search - does not count as 'research software'.

£100,000

in 2015/16 financial year

say researchers the UK

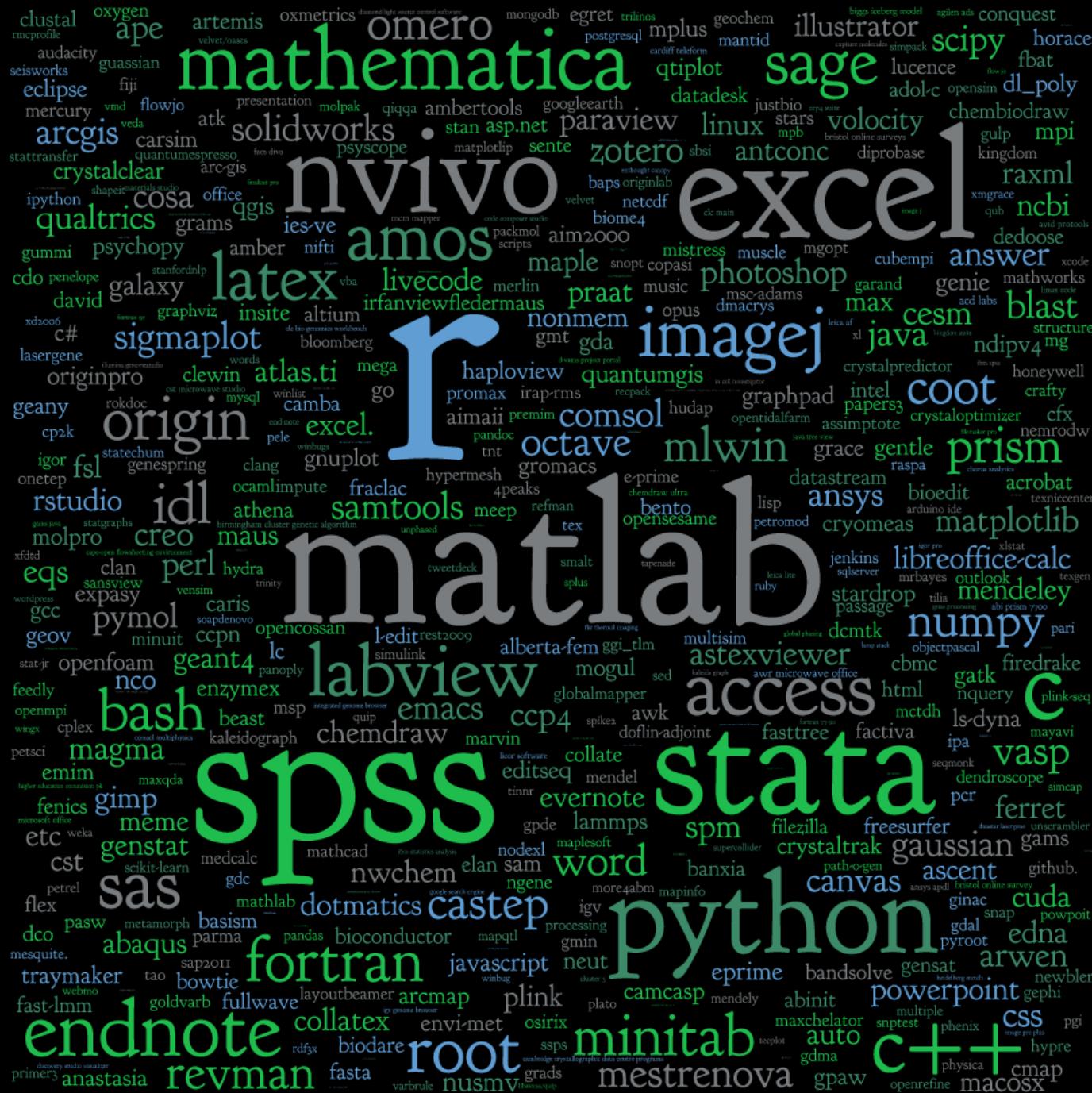
increasable software

research software

35,000

nodes
hosted
for
the
development
training

What software
is being used?



Who's doing
the work?

*That person who knows a lot
about research but mainly
does software development
because that's the bit of
research they seem to prefer*

(Two posts)	KTP Associate	Post Doctoral Research Worker	Training Fellow
HIVE Manager /	Associate	Post Doctoral	Statistical
HIVE Co-ordinator	Developer	Researcher	Computational
Project Leader /	Associate	Researcher in the	Genetics of
Researcher and	Electronics /	application of	Principal
Technical Lead	Robotics Engineer	Digital Technology, Bioinformatics	Programme
Hydro-informatics	Learning	Post-Doctoral	

Analyst/Programmer
Post Doctoral Principal
Research Assistant Bioinformatics
Simulation and Product

Applications Developer

Cancer Imaging **Linguist /** **Research Associate**
Applied Scientist

Applied Science Systems Maker Space Associate Web Dev
Post-Doctoral Radio Freq
Engineering Research

Architecture Development
Instrumentation Research
Engineer Marie Curie Fellow Associate
Stage Researcher /Postdoc Reader in
Computer

Assistant Data Programmer State Researcher Framework
 Marie Curie Early Genomics Computer Reporting A
l Investigators S. B. J. P. D. J. R. J. R.

Assistant Project Manager

Atmospheric Correction and Postdoctoral Fellow Opportunities

Radiative Transfer Model Scientist

- Learning Systems) Observation - genetic Research
IT Support Scientists Postdoctoral Research
Artificial Software Development - KITE

Technician (Linux / Medical Statistician Fellow) Data Manager
Windows Systems)Medical Bioinformatics Biomedica

Associate Professor Statistician/Senior Postdoctoral
Knowledge Transfer Medical StatisticianFellow in Cancer
Biostatistics Engineering Research

Distinguished National
Associate: **Engineer** Therapeutics **Postdoctoral** Research **€“ Social**

Biomaterialian in Potato

Smart Application Research Assistant Protection
Technologies LTD Developer Postdoctoral Research

NASC IT Support - Research
Programme and Associate
Knowledge Transfer postgradua
tia

Bioinformatics/Computational Partnerships (KTP) Systems Postdoctoral Programm Associate Administrator Research Fellow Research Fellow

Bioscientist in Microbiology

KTP Associate - Methods Fellow Postdoctoral Researcher
Policy Fellow Postdoctoral Researcher

Declarative (Logic in Machine and Functional) Learning and Applications

Bioinformatics Postdoctoral (Funding Office: Research) Developer
Postdoctoral Researcher
Policy Modeller Postdoctoral Researcher
put months)

Jan Researcher Associate 314 Scientist Developer
put (Precision Post - Doctoral Postdoctoral Herchel Sr

Bioinformatics scientist

Digitized by Sathya Sai Books

Researcher

Research Scientist

Software Engineer

Research Software Engineer

Research Assistant Research Associate Research Fellow

Software Developer

Scientist

Engineer

Research Engineer

Research Software Engineer

www.rse.ac.uk

The craftsman and the scholar

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

Ten reasons to be an RSE

- <http://www.software.ac.uk/blog/2013-08-23-ten-reasons-be-research-software-engineer>

Engineering a future for research software and its makers

- http://www.researchresearch.com/index.php?option=com_news&template=rr_2col&view=article&articleId=1345478

Save your work – give software engineers a career track

- <https://www.timeshighereducation.co.uk/news/save-your-work-give-software-engineers-a-career-track/2006431.article>

UK Association of Research Software Engineers

- 417 members, www.rse.ac.uk

Research Software Groups

- Culham, DIAMOND, Imperial, Kings, Manchester, Sheffield, Southampton, UCL

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