



Research *it*

Supporting your research

A newsletter from IT Services: Research IT

Welcome to issue #28, August 2015, in a [regular series](#) of updates on IT research support and facilities for postgraduates, researchers and academics of The University of Manchester.

Your main contact email address for research computing support is given on the last page; emailing your queries this way will automatically raise a job for you in the IT Services helpdesk system. Every day, routine work should continue to be submitted through the IT Service Desk on +44 (0) 161 306 5544 or via the Support Centre online at:

www.itservices.manchester.ac.uk/help/

Web Page: Research IT

The web site for our support areas and all contact details is available here:

www.its.manchester.ac.uk/research/



Get Help to Improve Your Research Software

If you write code as part of your research, then you can get help to improve it - free of charge - through the Software Sustainability Institute's Open Call for Projects.

You can ask for help to improve your research software, your development practices, or your community of users and contributors (or all three!). You may want to improve the sustainability or reproducibility of your software, and need an assessment to see what to do next. Perhaps you need guidance or development effort to help improve specific aspects or make better use of infrastructure.

A typical open call project runs between one and six months. Applications can be made [online](#) and are welcome from any discipline in relation to software at any level of maturity. The call closes on **30 September 2015**.

If you would like to know more about the Open Call please email info@software.ac.uk or alternatively, if you would like some advice on your application contact Rob Haines at robert.haines@manchester.ac.uk

Upcoming Events

Autumn Academy for HPC

The Academy is an intensive two-week course designed to train research workers to start modifying and developing effective and efficient code for applications in High Performance Computing.

The Autumn Academy is suitable for any researcher who has some familiarity with programming and wishes to start modifying and/or writing code for use on mid and high performance computer resources. The Academy is particularly well suited to PhD students who are about to start their first or second year of research in any area of Scientific Computing, although

applications are also welcomed from more experienced researchers.

Further information can be found [here](#). Applications should be submitted via the [website](#) by **16 August 2015**.

Seminar- Anatomy of Optimizing an Algorithm: A Look at the SVD Algorithm

Jack Dongarra of the University of Tennessee presents a seminar on Tuesday 4 August 2015 at 2pm in Frank Adams Room 1, Alan Turing Building. Please find the abstract for the talk below. Registration is **not** required for this seminar.

Title- Anatomy of Optimizing an Algorithm: A Look at the SVD Algorithm

Abstract:

“In this talk we will examine the progress made in improving the performance of the singular value decomposition algorithm from sequential implementations, to blocked reduction, to parallel implementations, to accelerator based usage. The singular value decomposition provides a convenient way for breaking down a matrix into simpler, meaningful components. The singular value decomposition of a matrix has many practical uses such as principal component analysis, data compression, and information retrieval”.

OpenFOAM User Days, Daresbury Laboratory

The 3rd UK and Ireland OpenFOAM user day(s) will be held at Daresbury Laboratory in Warrington from 2- 4 November 2015. Registration is free and can be completed [online](#).

The first day and a half will be fully dedicated to tutorials using the Hartree Centre facilities. The number of attendees to the tutorial session is limited to 45 due to the capacity of the training suite.

The last day will be dedicated to presentations from the community. If you wish to present your work please contact Stefano Rolfo at stefano.rolfo@stfc.ac.uk

MATLAB and Simulink Seminar

MATLAB and Simulink are hosting a seminar in from 9am-2:30pm on 15 September 2015 in Room C2, Renold Building aimed at researchers, engineers and scientists of all MATLAB experience levels involved in data analysis, algorithm exploration and control system design or people who want to meet other researchers, scientists and engineers doing complex data analysis and control system modelling.

The seminar will include talks on how MATLAB and Simulink can accelerate a wide range of research and development workflows, from data analysis to system modelling and prototyping. The talks will be delivered by experienced MathWorks engineers using live application examples.

To see the agenda, and to register, please visit the [event webpage](#).

Other News

Computing Insight UK 2015- Call for Papers

Do you want to be part of the UK's premier event for HPC, cloud computing and data analytics? Computing Insight UK will take place on 8-9 December at the Ricoh Arena, Coventry –The event will offer you the chance to hear about the latest developments in high performance computing, cloud and data analytics.

The event will include thirty minute presentations on real life case studies from academic and commercial users of HPC. *This call invites applications for presentations in the main programme at the event.* Brief abstracts of no more than 300 words should be sent to CIUK@stfc.ac.uk by **10 August 2015**.

Vacancies

Are you trying to recruit someone? Let us know and we will help you advertise here.

Research Computing Facilities

IT Services supports University of Manchester researchers and staff on a wide range of facilities including your own desktop, University owned clusters and externally hosted facilities. Links to a range of facilities are provided below. If you would like to find out more about the best option for your particular research needs, please [contact us](#).

- [University of Manchester Computational Shared Facility](#)
- [University of Manchester Condor Service](#)
- [N8 Regional High Performance Computing Service \(N8 HPC\)](#)
- [PRACE EU High Performance Computing Service](#)
- [UK Hartree Centre Facilities](#)
- [PRACE EU High Performance Computing Service](#)
- [XSEDE USA High Performance Computing Service](#)

Access to ARCHER

Researchers can request anything from pump-priming access to full projects on the UK High Performance Computing Service (ARCHER) for suitability for their work all year round via a lightweight application process. [Click here](#) for details.

Research Computing Training

University of Manchester Courses

IT Services offer a portfolio of short courses in research computing. [Click here](#) for the latest schedule. We can also tailor courses for doctoral training programmes and arrange on-demand training with external tutors. Please [contact us](#) to discuss your requirements.

Subject-specific Email Lists

Please note that these email lists are subject specific discussion forums, rather than a way of contacting IT Services.

[University HPC PhD Network](#)

finite-elements@listserv.manchester.ac.uk

fortran@listserv.manchester.ac.uk

sciprogramming@listserv.manchester.ac.uk

university-gpuclub@listserv.manchester.ac.uk

Useful Links

[Faculty of Humanities Blog for Researchers](#)

[Faculty of Humanities Training Hub for Postgraduates](#)

Contact Email

Research IT:

its-research@manchester.ac.uk

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[Faculty of Humanities Blog for Researchers](#)

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Online Copy

If you have received a printed copy of this newsletter and wish to follow the links, staff can download an electronic copy with clickable links at:

<http://documents.manchester.ac.uk/DocuInfo.aspx?DocID=24638>

Please help us increase our readership by forwarding the link to colleagues.

Next edition

The next edition of this newsletter will be circulated at the beginning of September 2015.

If you have any news to contribute, please contact Gillian Sinclair gillian.sinclair@manchester.ac.uk and Dalinder Sall dalinder.sall@manchester.ac.uk at any time.

Items received **before 28 August 2015** will be included in the next edition. News from academic colleagues and researchers are most welcome.