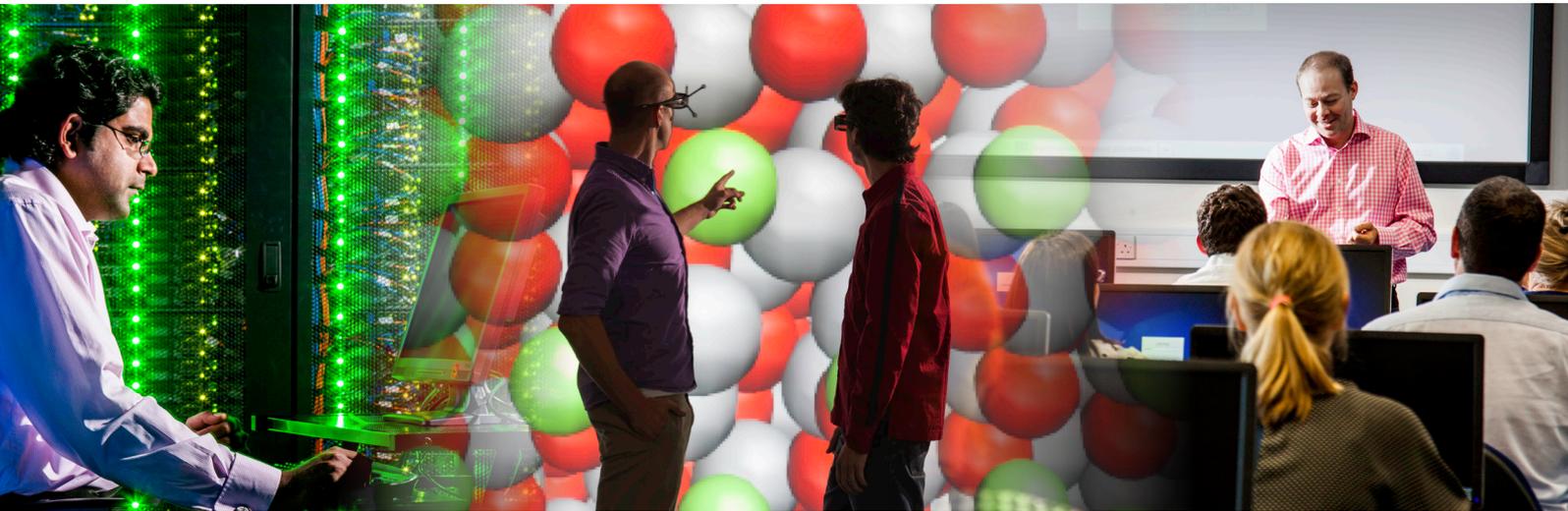


Providing the skills to succeed in supercomputing



Hartree Centre
Science & Technology Facilities Council



The STFC Hartree Centre is dedicated to developing the UK's modelling and simulation capabilities, but this means not only increasing companies' uptake of intense computing solutions, but also building the skills capacity for high performance computing (HPC) in the current and future workforce.

Challenge

While the industrial applications of intense computing continue to multiply, the growth of advanced computational skills struggles to keep up with demand. To unlock the full potential of supercomputing, the UK needs a strong talent base, but how can companies and researchers obtain proper training in such a specialist area? Supercomputers are not impenetrable enigmas that are particularly strenuous to use, but they do require sophisticated, specialist skills to maximise return on investment. Without the real life technology to work with, practical training and development opportunities within large-scale software development are limited.

Solution

The Hartree Centre Summer School was established to provide comprehensive hands-on education for graduate software developers, early career researchers and established industrial computational scientists looking to expand their working knowledge of HPC. Since its inception, the programme has expanded from one week-long intensive course on HPC, to three elective weeks, each with a different specialism. In 2014, areas covered included HPC, visualisation and big data, with the future goal being to diversify further into specialist areas, such as computational fluid dynamics (CFD) and stress analysis. As well as use of the Hartree Centre supercomputer to carry out practical exercises, delegates also hear from some of the most globally acclaimed speakers and trainers in the world of HPC, such as Professor Jack Dongarra, founder of the TOP500 supercomputer ranking project, who has received numerous awards and accolades for his research.

Benefits

For delegates, the Hartree Centre Summer School provides a rare opportunity to learn from world-renowned computational scientists and use one of the most powerful supercomputers in the world dedicated to large-scale software development. While this practical and application-based training increases their employability, UK companies also benefit from a larger and better-trained community of HPC-savvy recruits to draw from. These highly skilled, specialist staff can then go on to develop the application of HPC, visualisation and big data analytics as it relates to their industry, providing UK businesses with a greater competitive edge.

Work with us

We collaborate with industrial clients and research partners on projects that create insights and value using high performance computing, big data analytics, simulation and modelling.

By combining our world-class facilities with access to our specialists and computational scientists, we can enable your organisation to produce better outcomes, products and services more quickly and cost-effectively than through conventional R&D workflows.

With our partners we are developing the next generation of supercomputing architectures and software, combining existing best practice with innovation to deliver faster, cooler and more sustainable solutions capable of meeting the challenges of data intensive computing.

For more information:

- +44 (0)1925 603708
- hartreecomms@stfc.ac.uk
- @hartreecentre
- /company/stfc-hartree-centre

www.stfc.ac.uk/hartree