

# Delivering specialist data analytics training



Hartree Centre  
Science & Technology Facilities Council



The STFC Hartree® Centre has provided the **Data, Risk and Environmental Analytical Methods Centre for Doctoral Training (DREAM CDT)** with specialist training in big data analytics to give its PhD students a unique hands-on learning opportunity and enhance their computational and data skills.

## Challenge

The DREAM CDT is a collaboration between four universities: Cranfield University, Newcastle University, the University of Cambridge and the University of Birmingham. The centre supports PhD students across a variety of research domains – but all of which use some form of environmental analytical methods. Through funding awarded by the Natural Environment Research Council (NERC), DREAM runs a series of specialised training events for its students. With its strong professional development ethos, DREAM was looking for a leading UK research centre specialising in big data, able to provide an expert insight into big data solutions in action within industry and hands-on training sessions to put those skills into practice.

## Solution

With its extensive experience working on industrial big data challenges, the Hartree Centre proved to be the perfect partner. The centre worked with DREAM to provide a course tailored to suit the varied expertise of the audience, which included researchers from disciplines including engineering, geographical and computational sciences. Aiming to give a good grounding in a wide range of data analytics tools and techniques, the course provided hands-on sessions to test participants' learning throughout. DREAM CDT staff and students alike also spent half a day exploring the possibilities of cognitive technologies, getting to grips with techniques such as natural language processing using the IBM Watson platform.

## Benefits

The DREAM CDT students and staff alike can now put the knowledge and techniques learned into practice within their analytical research. They can also draw from an element of ongoing support and mentoring from the computational and data scientists at the Hartree Centre, if they find that they need guidance when trying to apply data analytics and cognitive techniques to their own research projects. Ultimately, these scientists and engineers have developed desirable skills that UK employers need to harness the full advantages of ever-expanding digital capabilities, data analytics and cognitive computing.

*"We were looking for the leading big data organisation in the UK and the Hartree Centre came out top for us. We were thrilled that NERC awarded us funding that enabled us to give our students a deeper knowledge of data science and analytics. This will ultimately feed into the various research projects programmes we are involved in to benefit future NERC science."*

– Dr Stephen Hallett, Research Fellow in Environmental Informatics, Cranfield University

## 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:

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