

Cirrus designated a UKRI National Compute Resource



**EPCC's Cirrus NCR system doubles in size,
broadening integrated access to compute
and data-intensive resources**

From our Director



Welcome to this issue of EPCC News.

We have been very busy over the first six months of this year – in particular with beginning some of the new activities we reported in the previous issue. A key one has been the start of the UK AI Factory Antenna, and it already feels like we're properly engaged with our many friends in the European Union again.

We have also been very fortunate to receive significant funding from DSIT and UKRI, which has allowed us to install a large upgrade to the new Cirrus service – now part of the network of UKRI National Compute Resources and our first fully solid-state, large-scale storage system as part of the National AI Data Infrastructure Network. We're also running infrastructure for the Arts and Humanities Research Council for the first time.

But EPCC is much more than an infrastructure organisation. I hope the wide variety of articles in this issue demonstrates this through the work of the Software Sustainability Institute, our many outreach activities, our work on environmental sustainability, and skills development. I'm particularly proud of the work that our HPC Systems Team has led for a number of years with our System Administration Internships and Graduate Apprenticeships.

Hopefully by the time you read this the procurement of the Next National Supercomputer will have started. I look forward to reporting more on that in future issues.

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EPCC at ISC26

We will be busy across the entire conference programme. Find us at **Booth H02** to learn about the work of the UK's first National Supercomputing Centre. See our website for details of all our activities:

<https://edin.ac/4tGLqOB>



Contents

3 Compute service expansion
Cirrus designated UKRI
National Compute resource

4 Pilot: UK AI Factory Antenna
Supporting AI innovation

6 Research at EPCC
Driving innovation with
advanced computational
science

**7 Quantum Advantage
TurboCharger**
Preparing for quantum
computing

**8 Digital Research
Infrastructure projects**
Strengthening UK capability

10 Lasair software platform
Supporting UK astronomy

**11 Edinburgh International Data
Facility**
Stay informed with EIDF!

12 Advanced Computing Facility
Preparing for the Next National
Supercomputing Service

14 Skills development
Early-careers support at the
Advanced Computing Facility

16 MSc programmes at EPCC
Keeping pace with changes
in HPC

**18 Software Sustainability
Institute**
Improving software in research

20 Women in HPC
WHPC activities at ISC26

21 EPCC Outreach activities
Edinburgh Science Festival
and Royal Society Summer
Science Exhibition

22 Biodiversity
Reducing and reversing
habitat loss

**23 EPCC Sustainability
Committee**
Working to minimise our
environmental footprint

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EPCC is a UK National Supercomputing
Centre based at The University of Edinburgh,
which is a charitable body registered in
Scotland with registration number SC005336.

Cirrus: A UKRI National Compute Resource

The Cirrus system at EPCC was recently confirmed as a UKRI National Compute Resource (NCR), along with another three new UK HPC systems and two existing ones. The largest of the new NCRs, Cirrus will provide compute resources to academia, government organisations, industry and the third sector.



UKRI National Compute Resources are the first step in delivering the UK Compute Roadmap (published in July 2025) to establish the UK as a leader in high-tech research. The NCRs will be supported for at least five years to 2031 and will provide a diverse range of technologies, along with unified access routes, to give researchers and engineers the resource mix they require.

Through this investment, Cirrus will more than double in size from 256 to 640 compute nodes, providing a total of 184,320 CPU cores connected by a high performance HPE Cray Slingshot 11 interconnect and supported by Ceph and VAST storage systems.

As the largest of the NCRs, Cirrus will enable the running of the biggest parallel models for software designed to exploit CPU architectures. This will complement the confirmed £750M UKRI investment in the Next National Supercomputing Service, a large GPU-based system which will also be hosted by EPCC.

The co-location of the large CPU resource of Cirrus and the UK's flagship GPU system, along with other data analysis and novel computing resources provided through the Edinburgh International Data Facility (EIDF), will provide unparalleled flexibility for complex modelling, simulation and data-intensive workloads backed up by shared access to advanced storage systems housed at EPCC.

Researchers will be supported in their use of Cirrus by more than 100 experts in high performance computing (HPC), AI and data science at EPCC.

The new NCRs will be available to researchers across all remits supported by UKRI funding, broadening access to compute and data-intensive resources beyond what has been previously available via the EPSRC Tier-2 HPC resources. The ability of Cirrus to integrate with the wider range of data infrastructure hosted at EPCC as part of EIDF and to support different ways of interacting with the available compute resources is critical to allowing diverse research communities to exploit Cirrus.

Cirrus and the other NCRs are designed to drive growth across the UK by maintaining the UK's position at the cutting edge of research and development. The diverse nature of the resources that will be available will enable researchers to choose the appropriate computational approach for their problem.

Access to Cirrus is also available for industry use, with support and consultancy available to commercial organisations from EPCC's large pool of expertise and experience. See the Cirrus website for details:

www.cirrus.ac.uk



UKRI NCR announcement:

www.ukri.org/news/new-national-computing-resources-to-open-doors-for-researchers

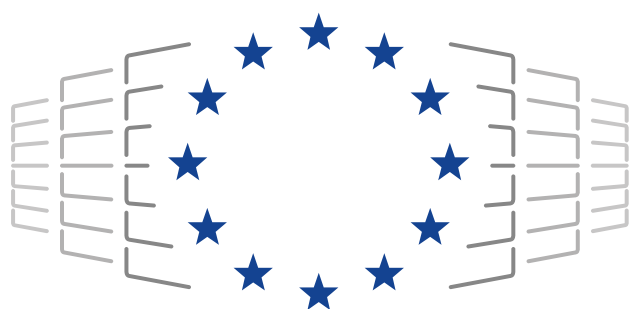
UK Compute Roadmap announcement:

www.ukri.org/news/government-and-ukri-launch-compute-roadmap

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The expanded Cirrus system at EPCC.



EuroHPC
Joint Undertaking

Supporting AI innovation with Pilot, the UK AI Factory Antenna

The UK AI Factory Antenna, Pilot, based at EPCC, supports the adoption of trustworthy artificial intelligence across the UK. It works with start-ups, small and medium-sized enterprises (SMEs), large organisations, and the public sector, and is linked to the broader European AI ecosystem.



AI Factories and Antennas in Europe

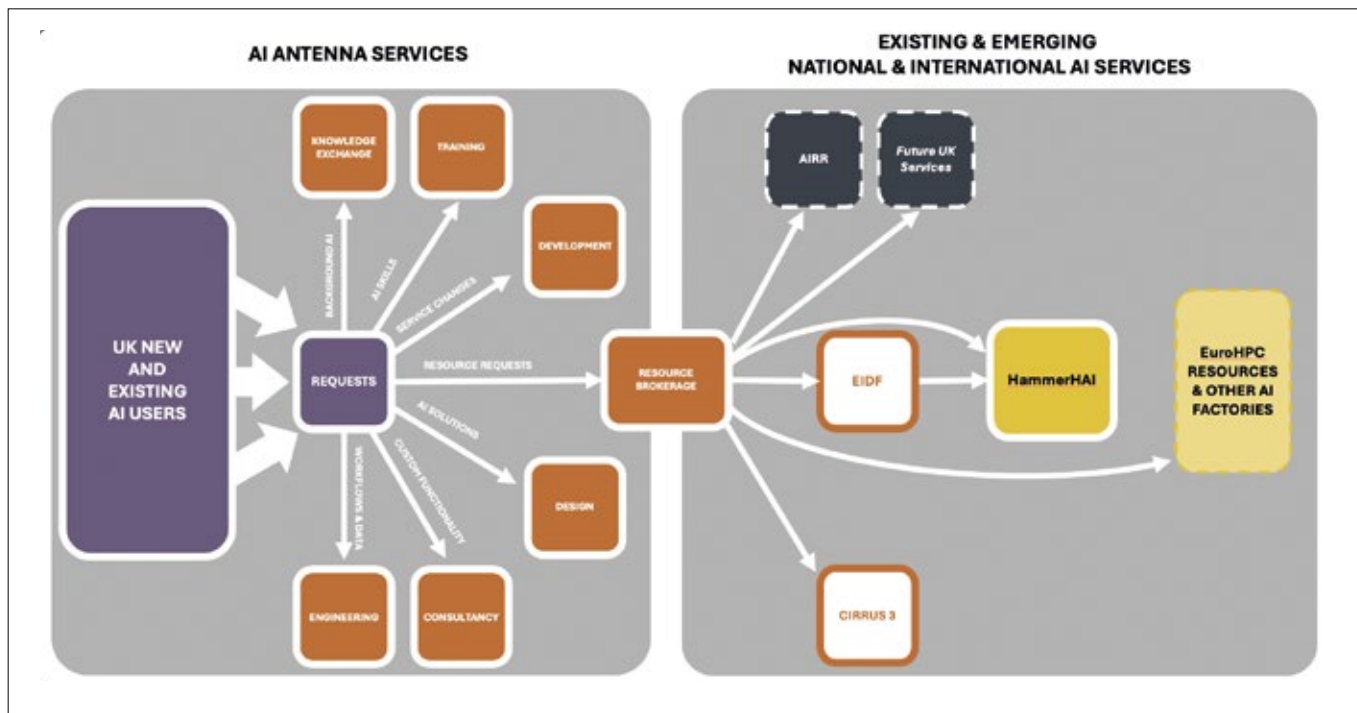
AI Factories and Antennas are being established across Europe as part of a coordinated effort to strengthen artificial intelligence capability. They act as centres for innovation and collaboration by bringing together:

- High-performance computing resources
- Data and digital infrastructure
- Academic, industry, and public-sector expertise.

Their aim is to support the development of advanced AI models and applications across sectors including health, manufacturing, climate science, finance, and space.

Pilot: the UK AI Factory Antenna

The **UK AI Factory Antenna (Pilot-UKAIFA)** is a €10 million (£8.6 million) project and one of thirteen Antenna initiatives across Europe. These projects complement the European AI Factories, which provide large-scale, AI-focused supercomputing infrastructure.



Pilot-UKAIFA is joint funded by the **EuroHPC Joint Undertaking** and the **UK Department for Science, Innovation and Technology**. It is delivered by EPCC in partnership with the **HammerHAI AI Factory**, coordinated by **HLRS**, the High-Performance Computing Centre Stuttgart, together with a consortium of German research centres.

The project focuses on expanding access to AI capabilities in the UK, particularly in the health sector, while HammerHAI supports manufacturing, engineering, and research communities in Germany.

Our approach

Pilot-UKAIFA will support organisations through:

- Workshops and regional roadshows
- Targeted calls for participation
- Consultancy and application-design projects.

These activities enable organisations to take part in **Endeavours**—projects that apply AI within a specific operational context. Endeavours can make use of:

- EPCC's **Edinburgh International Data Facility (EIDF)**

- Access pathways to European AI Factory resources.

Support is complemented by training, knowledge-exchange activities, and collaboration with UK and European AI competency centres.

Contact

Pilot-UKAIFA
A dedicated website is under development at:
www.pilot-ukaifa.ai



EIDF
www.eidf.ed.ac.uk



HammerHAI
www.hammerhai.eu

HLRS
www.hlrs.de

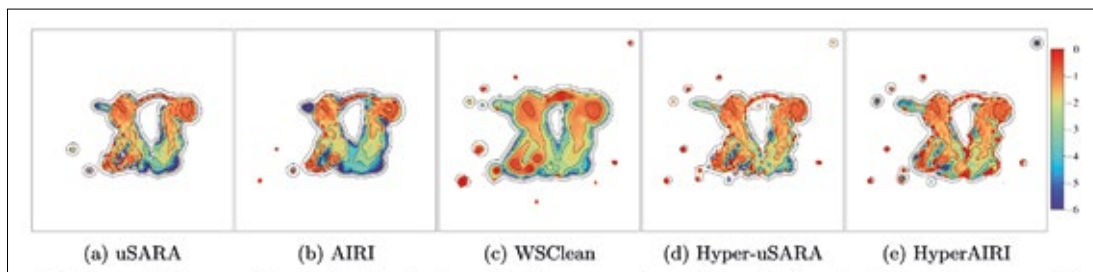


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Get involved

Pilot-UKAIFA services will be introduced during summer 2026. A dedicated website will also launch during this period. To stay informed about opportunities, visit:
www.epcc.ed.ac.uk/whats-happening/news





HyperAIRI: spectral index maps of “dancing ghosts” evaluated from the reconstructions of different algorithms.

Driving innovation with advanced computational science

EPCC researchers work at the intersection of research and computational approaches, pushing back the boundaries in astrophysics, quantum computing and digital humanities. Here are some examples of recent work.

HyperAIRI

This novel plug-and-play algorithm is designed for hyperspectral image reconstruction within the field of radio interferometry. Developed with significant involvement from EPCC, this method successfully extends earlier monochromatic imaging approaches to operate seamlessly across wide frequency bands, a critical requirement for the next generation of radio telescopes. <https://iopscience.iop.org/article/10.3847/1538-4365/ae3149>

Programming tools for analogue quantum computing

EPCC has contributed to a comprehensive review of programming tools for analogue quantum computing within a high-performance computing (HPC) context. This study surveys the current landscape of software tools equipped with analogue quantum capabilities, assesses their readiness for direct integration with traditional HPC environments, and identifies crucial gaps in contemporary programming models.

By looking beyond the hardware to software readiness and systems integration, this review helps to define the foundations for future hybrid quantum-HPC workflows. <https://quantum-journal.org/papers/q-2025-12-02-1927>

Mapping Change

EPCC is contributing to innovative

work at the intersection of artificial intelligence, data science and the humanities. The Mapping Change project has produced a fully reproducible, temporal, and semantic knowledge base built directly from the nineteenth-century *Gazetteers of Scotland*.

By employing GPT-4-assisted extraction, named entity recognition, semantic clustering, and geo-resolution, more than 50,000 dense historical entries have been transformed into highly structured datasets and a comprehensive RDF knowledge graph. The result is a powerful, open-access resource. This pioneering work demonstrates how EPCC is combining research software engineering, linked data and modern machine learning to support new forms of cultural and historical analysis. <https://zenodo.org/records/15397756>

PhD research

Our research culture is equally evident in work being undertaken by EPCC's PhD students, as can be seen in these examples.

Sam Jackson is investigating advanced methods to significantly accelerate tidal turbine modelling codes specifically for multi-GPU architectures. His research addresses the exceptionally high computational costs associated with the Computational Fluid Dynamics simulations used to

study complex turbine arrays, turbulence, and wake effects. Sam aims to enable dramatically faster and far more detailed modelling to support renewable energy applications.

Cathal McStay is developing heterogeneous architectural support for the CCS combustion solver developed at EPCC, ensuring that it can fully exploit the power of modern GPU-based HPC systems. Supercomputers increasingly rely upon specialised accelerator technologies, and Cathal's work will help foundational scientific software to remain efficient, scalable, and thoroughly prepared for emerging hardware architectures.

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These projects provide a snapshot of research undertaken at EPCC: developing robust computational methods, building open resources, and engineering high-performance software that turns advanced computing power into tangible, real-world research with multi-disciplinary impact.

Read more

EPCC Research themes

www.epcc.ed.ac.uk/research/research-themes



QATCH: preparing for quantum computing

Earlier this year funding was confirmed for the Quantum Advantage TurboCHarger (QATCH), to be led by the University of Edinburgh's Quantum Software Lab (QSL) in collaboration with the National Quantum Computing Centre (NQCC). EPCC's quantum computing lead, Oliver Brown, who is a member of QSL and a co-lead of QATCH, writes about the project.

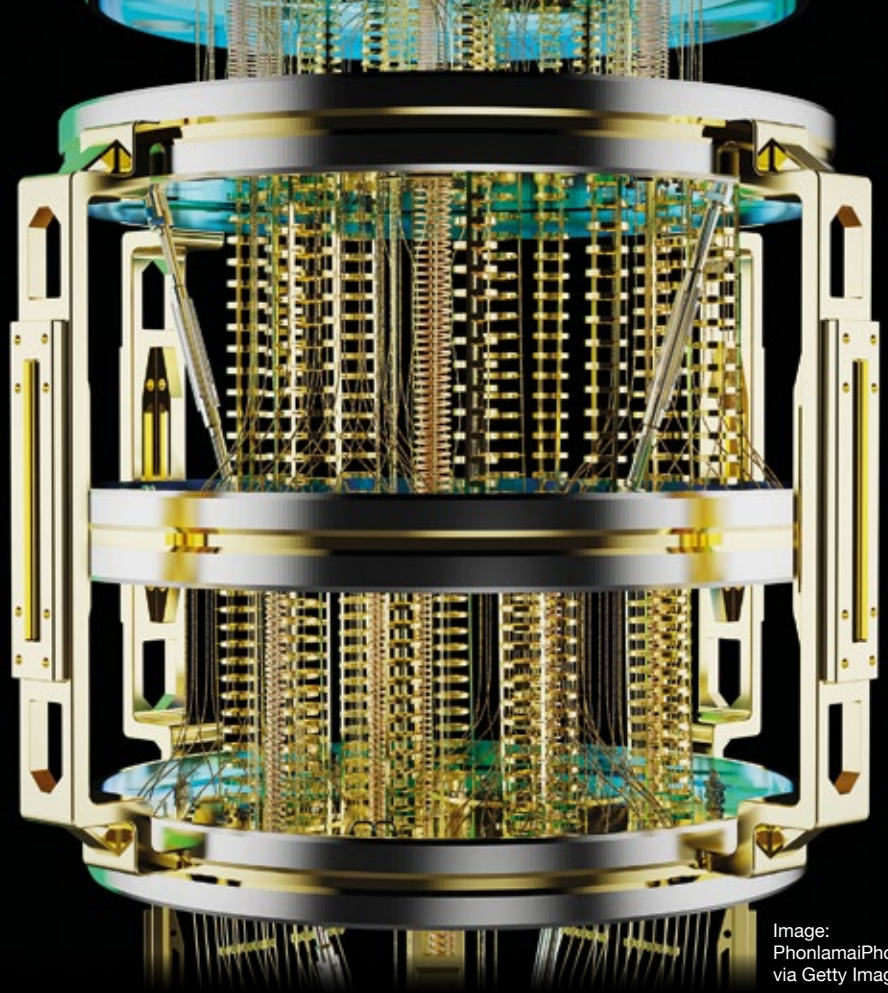


Image:
PhonlamaiPhoto
via Getty Images.

EPCC's involvement in QATCH will focus on the integration of quantum computing and high performance computing (HPC). As well as being of interest to EPCC, this is a crucial element of the UK Government's National Quantum Strategy Missions.

Our work in QATCH will focus on three areas:

- Creating a virtual datacentre, in which to test and benchmark hybrid quantum-classical workflows and schedulers.
- Continuing our development of tightly-coupled programming models for hybrid quantum-HPC.
- Continuing our development and maintenance of performant, scalable quantum computer emulation tools such as QuEST.

Virtual datacentre

This topic is important, as it will help us prepare for the eventual deployment of quantum computing resources at our Advanced Computing Facility. Several solutions already exist to support

the deployment of loosely coupled quantum computers alongside classical HPC, and we want to know the possible impact of these solutions on energy usage, system utilisation, and queue times. Our virtual datacentre will help us make informed decisions about which solutions to adopt when we eventually do deploy quantum hardware.

Programming models

This topic is my main research focus, and here the EPCC quantum group will continue to develop CQ, a C-like API for quantum computing. The near-term focus is on creating programming models with maximum flexibility, so we can support scientific application and library developers to incrementally introduce quantum computing into their existing HPC codes.

Emulation tools

Finally, classical emulators remain an important tool for the research and development of quantum algorithms and applications of quantum computing. Our work here will focus on ensuring that QSL and

the wider community have access to tools which are capable of scaling beyond a single node. This work should ensure that QuEST is ready for the Next National Supercomputing Service, and that we can provide a similarly scalable tensor network simulator.

Through our work in these areas, we will work towards QATCH's overall aim: helping develop the required applications and software tools to ensure UK academia and industry is ready to exploit quantum computing as soon as possible.

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Quantum Software Lab
www.quantumsoftwarelab.com

Research at EPCC
www.epcc.ed.ac.uk/research



UKRI Digital Research Infrastructure Programme projects at EPCC

The UKRI Digital Research Infrastructure (DRI) Programme funds research and innovation in data and computing systems. It supports the people and organisations developing the tools, services and skills that strengthen the UK's digital research infrastructure. EPCC staff are involved in several DRI projects across the programme.

Computational Abilities Knowledge Exchange (CAKE)



COMPUTATIONAL ABILITIES
KNOWLEDGE EXCHANGE

Without active coordination across the DRI Programme, best practice, software and skills could remain siloed within individual projects. CAKE therefore promotes collaboration within the DRI landscape by creating a more interconnected, open, inclusive and user-friendly infrastructure.

CAKE also acts as a connective layer across the wider computing landscape, linking the DRI programme with other activities. It runs Knowledge Exchange Fellowships and curates the CAKEbox community knowledge base, working to ensure UK DRI investments compound rather than duplicate, and that UK capability is well represented globally.

CAKE is led by EPCC in collaboration with Durham University and the University of Cambridge and will run until 2028. <https://www.cake.ac.uk>

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CHARTED



CHARTED works to make the ecosystem of digital Research Technical Professional (dRTP) skills and roles more transparent and easier to navigate. Its scope includes increasing understanding of different dRTP roles and the skills they require, and improving the quality of the existing training resources to make them more Findable, Accessible, Interoperable and Reusable (FAIR).

CHARTED is creating a toolkit to help evaluate the FAIRness of training resources. The tool will provide the foundation for one of four funding opportunities administered through CHARTED's flexible fund, with other funds including support for community events, and the improvement of resources and support for professional skill development.

CHARTED is a UKRI digital Research Technical Professional (dRTP) Skills NetworkPlus project. It is a collaboration between EPCC, Imperial College London and the University of Southampton. <https://drtp-skills.ac.uk/about/charted>

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DRIFT



DRIFT creates training for research facilitators and teams. It is currently developing research software project management training, and reviewing the resources available for digital research facilitators. Development also continues on the Gutenberg training platform, and the Visible HPC mini-clusters, which demonstrate some of the properties of DRI hardware. Over the next year DRIFT will help facilitate greater alignment between the resources that are being developed in this area across the UK.

DRIFT is a collaboration between EPCC, Imperial College London and the University of Oxford. <https://drtp-skills.ac.uk/about/drift>

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DisCouRSE: Developing a Community of Leaders



DisCouRSE is developing an empowered and engaged community of leaders across a wide range of digital Research Technical Professional (dRTP) roles, and the project builds on EPCC's long history of supporting RTPs.

The programme's Flexible Funding Scheme supports dRTP-led projects that strengthen leadership skills, support sustainable career pathways, and foster collaboration and innovation within the digital research community.

Funding calls run every six months and have supported a broad range of projects including leadership development workshops, mentoring and peer-support networks, skills and training programmes, and pilot initiatives designed to enhance collaboration and career pathways. <https://discourse-network.github.io>

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National Federated Compute Services NetworkPlus



The NFCS NetworkPlus is working to identify how to deliver the benefits of a federation of national, regional and institutional computing resources for researchers, resource and service providers, and funders. It brings together communities from different disciplines across the UK, primarily through flexible funded projects and events, engaging with users and providers. Focusing on governance, technology and community, it will develop a roadmap for a national federation of compute services to support the UK DRI. <https://nfcs-networkplus.ac.uk>

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UKRI Living Benchmarks



This project is building skills and expertise in the UK research community in support of

supercomputer procurement and performance assessment. The expert community requires people with diverse skills working together: domain experts, DRI professionals and procurement teams. Well-understood benchmarks – and an expert community to sustain them – will improve procurement outcomes and optimise DRI during their lifetime.

The project comprises three work packages to develop skills in the community to deliver the expertise required and provide an initial set of open-source benchmarks which can be sustained beyond the lifetime of the project. <https://github.com/ukri-bench/ukri-bench>

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NetDRIVE Champions



NetDRIVE is working across the entire DRI landscape to connect communities, share expertise, and build a clear pathway to decarbonising research. As part of this, it supports community champions, with three colleagues appointed within EPCC:

Andrew Turner, EPCC. I aim to make emissions awareness a normal part of high performance computing (HPC) culture by delivering training on green HPC, demonstrating why action matters and how carbon footprints can be reduced.

a.turner@epcc.ed.ac.uk

Kirsty Pringle, EPCC. I promote best practice in sustainable research software. I am committed to building inclusive networks, sharing success stories, and giving people the confidence to advocate for sustainability within their own organisations.

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Lorna Smith, EPCC. I work on evidence-based recommendations for sustainable procurement to drive system-level change across the DRI landscape. I promote biodiversity literacy and nature positivity to maintain and improve the biodiversity around the Advanced Computing Facility. <https://uknetdrive.org>

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UKRI Digital Research Skills Catalyst



UKRI Digital Research Skills Catalyst

This project is working to create a distributed national digital research training and support service. It provides a portal for discovering high-quality, peer-reviewed, FAIR training resources, and a support service for researchers applying digital skills to their own research challenges. The project builds communities of practice across multiple institutions to support the career development of digital research professionals across multiple domains.

EPCC is working on the development and delivery of open science educational resources, data science training for health and biosciences, and competency-based curriculum development. <https://digitalskillscatalyst.ac.uk>

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The projects described here leverage EPCC's wide range of skills and expertise, developing capabilities that will advance the UK's Digital Research Infrastructure and ensure it is fit for purpose in the coming years.

UKRI Digital Research Infrastructure Programme

<https://edin.ac/4tKwVdL>



Supporting UK astronomical research

EPCC is a key player in the LSST:UK Consortium, which enables UK astronomers to access the unprecedented 10-year study of the Southern sky known as the Legacy Survey of Space and Time (LSST).

Using the world's largest digital camera, the Vera C. Rubin Observatory in Chile will capture about 200 Petabytes of incredibly detailed and high-fidelity images and measurements. By observing each patch of sky around 800 times during the survey to create a movie, it can measure intricate detail and capture the dynamic nature of our Universe.

Recognising the huge significance of LSST for astronomy and cosmology, the UK astrophysics community came together early in the 2010s to form the LSST:UK Consortium to coordinate UK involvement in the Observatory, helping to guide the Survey and provide technology and software in return for access for around 1,500 UK-based astronomers.

Lasair Community Broker

Motivated by the vast potential of the dynamic measurements being made by Rubin, a team from University of Edinburgh (EPCC and the Institute for Astronomy), University of Oxford and Queen's University Belfast has developed a software platform called Lasair. One of a handful of Rubin Community Brokers, each night Lasair receives a live feed of alerts containing information about detected astronomical transients: changes in the sky.

The feed will capture an incredible range of phenomena – from as near as our Solar System to the most distant galaxies ever detected. Lasair is focused on transient events and we expect to detect many examples of supernovae, critical for measuring the expansion and composition of the Universe,

and kilo-novae, which are signatures of gravitational-wave sources caused by neutron-star mergers and are responsible for creating most of the Universe's heavy elements.

Lasair faces a huge challenge as each night the Observatory expects to detect around ten million such alerts, transmitted in close to real-time from Chile via the Rubin data facility in California to the Somerville research cloud, hosted at EPCC's Advanced Computing Facility.

The speed and volume of the alerts have necessitated the development of custom software services at the cutting edge of HPC and data science to receive, analyse and cross-match alerts as they arrive, before relaying them to the international astronomy community. Lasair provides a range of interfaces that allow astronomers to precisely specify the kind of alert they are interested in.

Somerville research cloud

Operational since 2017 and jointly managed by EPCC and the Institute for Astronomy, EPCC's Somerville research cloud is designed to handle high-velocity and high-bandwidth data streaming. It combines class-leading networking and storage to enable unprecedented research capabilities. The service is a perfect fit for Lasair, providing scalable compute, 100 Gbps connectivity into the Janet academic network, and NVMe-based working storage.

Significant impact

Currently the Rubin alert stream is in an early-operations mode,



producing scientifically valuable alerts on a subset of nights, as it builds up a map of the sky. Despite this, Lasair is already having a significant impact, with more than 300 active users and around 200 live queries registered on the real-time stream. The service has coped with the rate of alert production, which peaked at 7 million alerts in one night.

A key mode of use of Lasair is telescope follow-up, when particularly unusual activity can be referred to other observatories, who then redirect their own instruments to gather more information. For example the UK-based TiDES team will ensure supernovae detected by Lasair are coordinated with analyses by the 4MOST spectrometer in Chile to create the largest cosmological sample of Type Ia supernovae ever assembled.

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Citizen science

The Lasair team is collaborating with Zooniverse to enable various citizen-science campaigns, engaging individuals with little or no scientific training or background. Early successes include a campaign to find rare, super-luminous supernovae.

Read more

Paper: Enabling science from the Rubin alert stream with Lasair
<https://doi.org/10.1093/rasti/rzae024>

Lasair website
<https://lasair.lsst.ac.uk>

Stay informed with EIDF



We know how vital it is for our users to keep pace with technological change. That's why EIDF's services include an e-newsletter to bring the latest developments straight to your inbox.

The monthly Edinburgh International Data Facility (EIDF) newsletter is a resource for researchers, academics and innovators to stay connected with the cutting edge of research infrastructure and computing services.

Each edition brings you the most important updates from our private research cloud, including new service roll-outs, major upgrades, and stories from the EIDF user community. You'll also find invitations to upcoming events and collaboration opportunities, giving you direct access to EIDF experts and your peers.

User stories: learning from each other

The EIDF e-newsletter isn't just about technology, it's also a platform for sharing knowledge and building connections within our user community. For example, Emma King-Smith's presentation on leveraging GPUs for machine learning provides actionable tips for researchers who handle large datasets, while Alejandro Bordallo Micó's work on assistive driving technologies demonstrates how EIDF's infrastructure supports real-world innovation.

Service news

EIDF has rolled out a series of substantial software upgrades over the past year for the direct benefit of our research community.

Shared file storage solutions

Available across our suite of computing services, our new range of shared file storage solutions give users new options for scalable, reliable and versatile data storage: crucial for managing the increasingly complex datasets that drive modern research. By listening

to our users, we have ensured these changes address the challenges researchers face in large-scale computational projects. <https://docs.eidf.ac.uk/storage/overview>

Container Registry Service

A major step forward for reproducible research and collaborative projects, this new service empowers researchers to build, store and share containerised applications with greater efficiency and version control. By simplifying deployment processes, the Container Registry supports teams working on complex projects, making it easier to replicate results and share environments across institutions. This capability is particularly valuable for multi-institutional collaborations and projects that demand transparency and repeatability.

Integrated NVIDIA H200 GPUs and high-speed InfiniBand

This advancement significantly boosts processing speed and connectivity, making EIDF an even more powerful platform for large-scale simulations, AI model training and big data analysis. These upgrades have already enabled research teams to accelerate their work, reducing the time required to produce results.

Secure virtual desktops

Introduced in response to the growing need for data privacy and protection, this service offers a secure, isolated computing environment that ensures sensitive data remains protected throughout every stage of a project. Project leads can customise their workspaces according to their specific requirements, while EIDF's robust security protocols help prevent data leaks and maintain

compliance – an increasingly important factor for grant-funded and collaborative research.

Join the conversation

Every month we roll out new capabilities, upgrades and community engagement activities to drive research forward. Subscribe to the EIDF e-newsletter and never miss an update.

Magdalena Drafi-McHugh, EPCC
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Subscribe to the EIDF e-newsletter

Be informed, engaged, and inspired! Subscribe now to join a vibrant community that is shaping data science. We look forward to sharing the next chapter of EIDF's story with you: <http://eepurl.com/jpveoM>



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EIDF is a private research cloud infrastructure optimised for data science. Available for use by industry and academia, EIDF provides customer, data and compute services: <https://edinburgh-international-data-facility.ed.ac.uk>





ACF: preparing for the next level of its evolution

The Advanced Computing Facility (ACF) is EPCC's world-class supercomputing data centre, where the majority of our computing resources are housed. With a number of computer rooms and plant rooms, the ACF provides the secure underpinning infrastructure and platform required to run our complex computing services.

Building for the future

During 2019 and 2020, EPCC and the University of Edinburgh, in partnership with Robertsons Construction, extended the Advanced Computing Facility (ACF), building Computer Room 4 (cr4) and Plant Room D (prD). Providing 6MW of power and cooling capability, the new 500m² computer room provided us with a world-leading data centre space in which to build the Edinburgh International Data Facility (EIDF), which underpins the Edinburgh and South East Scotland City Region deal.

EPCC and the University of Edinburgh also worked with Scottish Power Energy Networks around this time to strategically purchase and secure a new 30MW power connection to the ACF, to augment the 8MW already provided to the site. This 38MW overall power supply positioned EPCC to

host the next generation of large-scale supercomputer for the UK.

The ACF evolves continually. Each financial year there is significant investment in the capital replacement of plant infrastructure, and the remodelling of our computer rooms to host new and more demanding hardware.

As part of our site strategy, our Computer Room 1 (cr1) and supporting infrastructure were significantly upgraded from 2022–2024 to allow us to host EIDF equipment, including the Cerebras CS-3 cluster installed in early 2024. This also enhanced our flexibility to install equipment in different computer room locations.

In summer 2025, Computer Room 2 (cr2) was upgraded as part of a multi-year project to fully refurbish the room, allowing us to host expansion equipment and services there.

In early 2026, we started a process of “mothballing” equipment in prD to allow us to preserve our large scale plant equipment in anticipation of the next big project...

Next National Supercomputing Service

Following this remodelling of the location of our services, in summer 2026 we will break ground on an ambitious new build programme at the ACF. This will modify and extend cr4 and prD into a 30MW-capable room, providing EPCC and the UK with a unique capability to host the large-scale Next National Supercomputing Service.

This programme of work will result in a significant change around our site, with the footprint of the existing cr4 and prD areas doubling by late 2027. The changes will be documented in related digital content creation projects.



These photographs show spaces at the ACF which are being prepared for the arrival of the Next National Supercomputing Service.



Paul Clark, EPCC
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New critical services

We have also been working hard to deliver new critical services to support UK science. Utilising Power Distribution Units (PDUs) from cr4, we have improved the power distribution options in computer room 3 (cr3) to prepare for two exciting new projects.

VAST storage cluster

Uninterruptable Power Supplies (UPS), which provide conditioned power to support critical services, will power our new 30PB VAST storage cluster. By employing compression technology, our cluster will be capable of storing 60PB of data in less than four standard IT racks!

Cirrus

Last year we deployed Cirrus, a state-of-the-art supercomputer backed by the Edinburgh and

South East Scotland City Region Deal and hosted by EPCC for researchers and industry partners across the UK.

As described on p3, Cirrus has been designated as a UK National Compute Resource (NCR) and will provide high performance computing (HPC) facilities to support research across the country.

Cirrus is the only NCR service already in operation. As part of this UKRI investment it will more than double in size this year, complementing the Next National Supercomputer, which will also be operated by EPCC.

The investment will add more compute nodes to Cirrus, taking the total number of CPU cores available to over 150,000. We expect the additional Cirrus resources to be available to researchers by Autumn 2026. See article on p3 for details.

Sustainability and responsibility

The ACF is powered by 100% REGO (Renewable Energy Guarantees of Origin) certified electricity and uses free cooling where possible. EPCC has invested in open source training on reducing HPC emissions and is working to actively enhance onsite biodiversity (see p22), providing repeatable approaches for the wider HPC community. There is understandably concern about the water usage of data centres, and we are proud to note that on average the ACF's daily consumption is approximately equal to that of seven people.

Read more about the ACF
www.epcc.ed.ac.uk/hpc-services/advanced-computing-facility



Early careers in research infrastructure engineering at EPCC

At EPCC we are committed to growing the skills required to develop and operate complex supercomputing and data science systems, and to help people find their way into careers in research computing systems administration, research infrastructure engineering and data centre engineering.

We have a long history of providing one-year **system administration internships** and two-year **Graduate Apprenticeships** (historically run in partnership with Edinburgh Napier University), and in recent years have expanded our early careers offerings. Our third cohort of three-month **data centre engineering interns** joined us this summer via the University of Edinburgh Employ.Ed scheme, and the second iteration of our new **MSc course in HPC System Administration** ran in semester two of the 2025/26 academic year. We have also recently completed a pilot of a **Modern Apprenticeship in Network Infrastructure**.

System administration internships

Our one-year system administration internships are open to undergraduates working towards a degree in a relevant subject that includes the option of a 12-month industry placement, such as the cybersecurity qualifications offered by Edinburgh Napier University. Placements allow students to put into practice what they cover at university, to learn on the job from experienced professionals and to develop practical workplace skills that will help them secure, and succeed in, their first system administration roles.

System Administration Graduate Apprenticeships

Many of our interns successfully apply for our Graduate Apprentice roles at the end of their placement,

and we also welcome Graduate Apprentices directly onto the programme. Graduate Apprenticeships are part of a national scheme run by Skills Development Scotland (there are similar schemes for other home nations), and our apprenticeships are open to home students eligible to start the third year of a degree in a relevant subject at an institution that allows for completing an honours degree via the scheme. Graduate Apprentices are employed full time for two years, during which they are given one day of study leave per week to support them in completing their degree while also receiving training on the job and playing an essential role in operating and developing EPCC systems. By the end of the scheme, our Graduate Apprentices have the skills they need to successfully apply for a permanent system administration role, indeed many of our research infrastructure engineers joined EPCC via this route and have since progressed to senior roles in the team.

Fundamentals of HPC System Administration postgraduate course

In 2025 we introduced a postgraduate course covering the Fundamentals of HPC System Administration, which was developed by senior EPCC research infrastructure engineers. Designed for students who already have a grounding in general system administration, it provides a good introduction to, and practical

experience of, administering high-performance computing (HPC) clusters. This annual course can be undertaken either as part of an MSc in HPC or as a standalone course under the University of Edinburgh postgraduate professional development scheme.

Employ.Ed Data Centre Engineering summer internships

We are in the third year of offering these **summer internships in data centre engineering**, which are targeted at University of Edinburgh undergraduates who are studying mechanical or electrical engineering. Based at the Advanced Computing Facility, our state-of-the-art, 38MW data centre, the internships give insight into the wide variety of mechanical and electrical systems required to support large scale research computing and to build knowledge and skills relevant to working in the growing, and strategically important, data centre sector.

Modern Apprenticeship in Digital Technology pilot

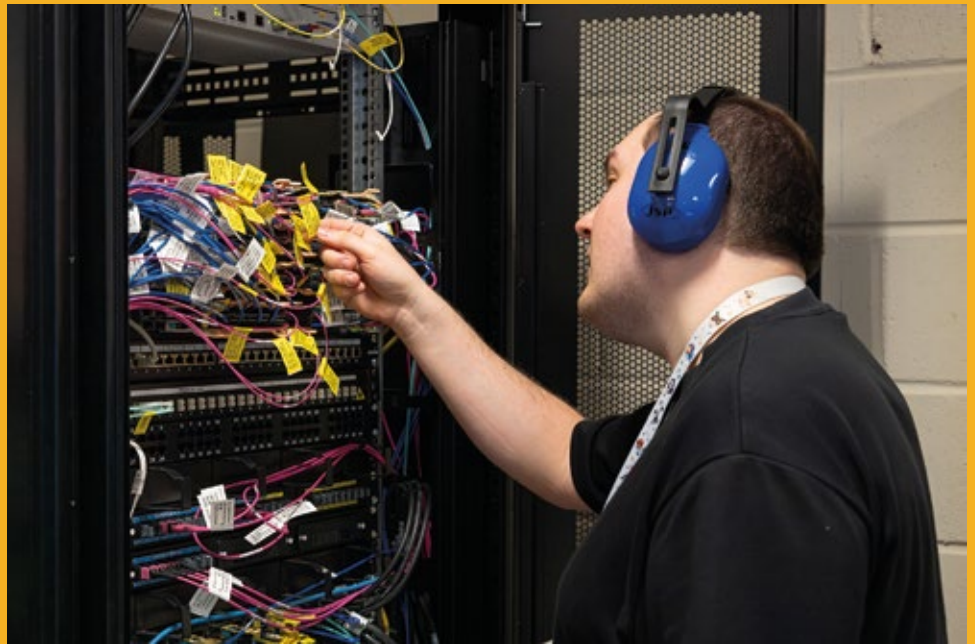
This pilot is our newest strand of early careers. Modern Apprenticeships are a Skills Development Scotland scheme and there are analogues in other parts of the UK. Digital Technology Modern Apprenticeships can be undertaken at Higher/SCQF6 level or Higher National Diploma/SCQF8 level, and our trial was of the SCQF8 Digital Technology: Technical Apprenticeship in Network Infrastructure

| acf |

The Apprenticeship, which combined a syllabus offered through an accredited provider with on-the-job training and experience, was undertaken by Max Jones, our data centre technician (shown in the photographs here). Max joined EPCC in 2023 to support the large amount of racking, cabling and other infrastructure installation/decommissioning activity at our data centre, and quickly proved an invaluable member of the team. The Modern Apprenticeship was an opportunity to build on the practical experience Max had gained with us and to start developing more general infrastructure engineering and system administration skills.

Max recently successfully completed his qualification, and this is a good time for us to consider how Modern Apprenticeships might provide a way to get involved earlier in people's journeys towards careers in research infrastructure engineering and offer an alternative route into our placements and Graduate Apprenticeships.

Zoe Payne, EPCC
z.payne@epcc.ed.ac.uk



Graduate Apprenticeships

<https://edin.ac/48Qmflk>

Edinburgh Napier University

<https://edin.ac/4tUrQiR>

Employ.Ed

<https://edin.ac/3UrKgrd>

MSc course in HPC System Administration

<https://edin.ac/3C192ss>

Modern Apprenticeship in Network Infrastructure

<https://edin.ac/3RdXqcZ>



EPCCC's evolving MSc programmes

The incredible growth of the number of AI and machine learning applications is driving the evolution of high performance computing. Our MSc programmes are also changing to match the expansion of hardware and applications areas, offering new systems for our students to use and novel areas to explore in MSc dissertations.

MSc graduation 2025

Key to any degree programme are its staff and students. As ours run for a full year there is very little downtime, so the graduation ceremony every November is an important opportunity in the academic calendar to reflect on the successes of the previous year.

We welcomed both on-campus and online students, and gave out class medals to the top students in each of the programmes. It was notable this year that the medallist for the on-campus MSc in HPC with Data Science was, for the first time, a part-time student. I know our full-time students all work very hard on their studies, so it is particularly impressive for someone studying part-time to successfully juggle their academic workload with ongoing employment pressures and deadlines.



Graduation reception for the class of 2025, held after the formal ceremony in the University's nearby McEwan Hall.



New HPC resources

Although the Next National Supercomputer won't be up and running for some time, our students continue to access substantial HPC machines for course work and research dissertations. Day-to-day teaching has moved away from our old Cirrus system, which was decommissioned in late 2025. For this academic year our students are now using ARCHER2, the current UK National Supercomputing Service, for CPU work, and the Edinburgh International Data Facility (EIDF) for GPU work. Students also have access to the refreshed Cirrus system that was installed in late 2025, which will be expanded this summer as a UK National Compute Resource service (see Cirrus article on p3).



Expanded scope of MSc dissertations

The range of topics researched by this year's students is wider than ever before. We continue to supervise projects in core HPC areas (such as performance benchmarking, evaluation of new programming languages and features, parallel file IO and novel parallelisation techniques), but the rapid growth of AI has led to an increasing number of AI-related MSc dissertations. These cover diverse areas including analysing social media posts to detect fake news, using generative AI for intelligent tutoring systems, forecasting El Niño events in the Earth's climate, and prediction of 3D protein structures.

Additionally, the ISC26 Student Cluster Competition will be an element of the dissertation projects of those students who are part of TeamEPCC.

TeamEPCC at the ISC26 Student Cluster Competition

TeamEPCC, comprising five students from EPCC's MSc in HPC and one EPCC apprentice from Edinburgh Napier University, has been selected to compete in the in-person ISC26 Student Cluster Competition (SCC). This year, 21 student teams from around the world have joined the virtual part of the competition, and 10 teams, including TeamEPCC, will head to Hamburg to compete in-person during ISC26.

The in-person competition teams each design and run their own HPC cluster. During ISC26 SCC, the teams will compete to achieve the best performance across a range of benchmarks and applications within the 6KW power limit on their clusters.

TeamEPCC has been preparing for the competition challenges that will also form part of the MSc student members' dissertation projects. The ISC26 SCC offers the opportunity to extend their HPC expertise beyond the classroom while meeting and learning from fellow student teams and experts across the global HPC community.

For this year's competition, our cluster design adopts a hybrid architecture aimed at maximising performance while meeting the diverse requirements of the competition challenges. The cluster comprises a GPU-accelerated node featuring eight NVIDIA H200 GPUs, dual Intel Xeon Platinum 8558 CPUs and 1.5TB of DDR5 memory, alongside two CPU blades equipped with 8 nodes, each with two AMD EPYC 9334 CPUs and 384GB of DDR5 memory. InfiniBand is used for the interconnect.



The future

As the first UK National Supercomputing Centre, EPCC's user base will continue to expand into new research areas and communities. And as an applied centre, where we aim to teach students the skills that our staff use on an everyday basis, this can only lead to an even wider range of research project opportunities for our MSc students. Coupled with the growing possibilities afforded by the Next National Supercomputing Service and our status as the UK AI Factory Antenna (see p4), we don't expect to run out of exciting MSc projects in the foreseeable future!

Xu Guo and David Henty, EPCC

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d.henty@epcc.ed.ac.uk

Come and meet TeamEPCC at ISC26 Booth "Foyer4 – EPCC".

The team will be delighted to share more about their cluster design and talk through their competition work at the ISC26 Student Cluster Competition!

LinkedIn: @TeamEPCC UoE

X: @teamepcc

Masters' programmes at EPCC

www.epcc.ed.ac.uk/education-and-training



TeamEPCC in front of the McEwan Hall, Edinburgh. From left to right: Lewis Coates, Saad Tariq, Abdallah Kharouf, Iris Xu, Akeel Ather Medina and Raul Costa.

News from the Software Sustainability Institute



The Software Sustainability Institute (SSI) is the first organisation in the world dedicated to improving software in research. It was founded on the premise that helping individuals and institutions understand the vital role that software plays in research would accelerate progress in every field of scientific and academic endeavour.

2026 International RSE Survey

The Research Software Engineering (RSE) community continues to grow. To enable SSI and the many national RSE associations to fully support it, we launched the 2026 International RSE Survey to help us better understand what RSEs need and how we can advocate for the community with policymakers and funders.

The Survey produces incredibly valuable data that anyone, including national associations, funders and policymakers, can use to understand the RSE community. The last survey took place in 2022 and collected responses from over 1000 people around the world.

The results of the 2026 survey will be posted on the SSI website. View the results of previous surveys, including a worldwide view of the data and breakdowns by country, at: rse-survey.soton.ac.uk/superset/dashboard/RSE_survey

Research Software Maintenance Fund



The SSI Research Software Maintenance Fund (RSMF) is a new initiative offering £4.8million to support existing research software. It aims to improve how research software is maintained and reduce technical debt, ensuring essential tools remain available to the research community.

Round Two of the Fund ran earlier this year, accepting applications for

up to £150k and a duration of up to 12 months. Successful projects will be announced in July.

Find out more: www.software.ac.uk/research-software-maintenance-fund

Fellowship Programme



The SSI Fellowship programme offers a unique financial support package, networking opportunities and professional guidance. Each Fellow is an important ambassador for good practice in research software. The Fellowship is an opportunity to be part of an engaging, supportive, and inspiring community. We believe in “Once a Fellow, always a Fellow”, and continue to support and engage with our Fellows beyond their inaugural 15-month period.

The next round of applications will open in August. See: www.software.ac.uk/programmes/fellowship-programme

Collaborations Workshop 2026



The Collaborations Workshop (CW), SSI's flagship event, took place as

a hybrid event from 28–30 April at ICC Belfast. CW brings together researchers, developers, innovators, managers, funders,

publishers, policy makers, leaders and educators to explore best practices and the future of research software. The event centred around one powerful theme and clear purpose: Strengthening the Research Software Community.



Research software is at the heart of discovery, innovation, and trust in research. Yet its future depends on the strength of the people and communities behind it. Delegates explored how to build a more connected, inclusive and sustainable ecosystem that empowers practitioners,



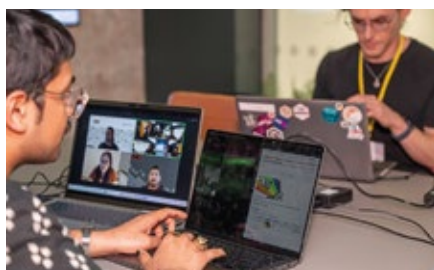


Attendees of CW26 in Belfast.

researchers, developers and advocates alike. They were also able to focus on fostering national and international collaboration, supporting career development across all stages, and embedding equity, diversity, inclusion, and accessibility into our collective practices.

Keep an eye on our website for news about the next Collaborations Workshop. Read about CW26: www.software.ac.uk/cw26

Diversity in Research Software Engineering



The RSE professional community has continued to grow since the role was first named at an SSI workshop in 2012. However, RSE has a diversity issue: in the most recent International RSE Survey, around 75% of UK respondents identified as white and 71% identified as male. In fact, RSE is less diverse than software engineering in industry, academia and the general UK workforce as a whole.

The SSI InclusiveRSE research project aims to understand the

barriers to equity within the RSE profession and consider how they can be mitigated. So far, they have conducted semi-structured interviews to explore the experiences of research software professionals with minoritised identities such as race, gender, social class and disability status.

Some of the early results of their research can be found at: www.software.ac.uk/blog/equity-diversity-inclusivity-and-accessibility-research-software-engineering-guidelines-making

Environmental sustainability



Set up by SSI Fellow Loïc Lannelongue, Green DiSC is a digital sustainability certification scheme that helps guide research groups (or central sustainability teams) through a series of criteria to encourage them to reflect and adopt good practices. The SSI is currently preparing an application for Bronze Green DiSC, which has provided a valuable opportunity to review and reflect on our own practices. One key outcome has been the recognition that, while sustainability considerations are already embedded across many aspects of our work, they would be strengthened by being brought

together within a single, clear policy to guide staff and Fellows.

We have also published the SSI's first Environmental Sustainability Policy, which was developed collaboratively across the Institute, ensuring that all members of the SSI team had the opportunity to contribute ideas and shape our approach.

This policy marks an important milestone in the SSI's ongoing commitment to supporting environmentally sustainable research software practices both within the Institute and across the wider research community. We expect the Policy to be refined as our understanding grows.

Green DiSC: www.software.ac.uk/GreenDiSC

SSI Environmental Sustainability Policy: www.software.ac.uk/environmental-sustainability-policy

Denis Barclay, EPCC
d.barclay@epcc.ed.ac.uk

The Software Sustainability Institute

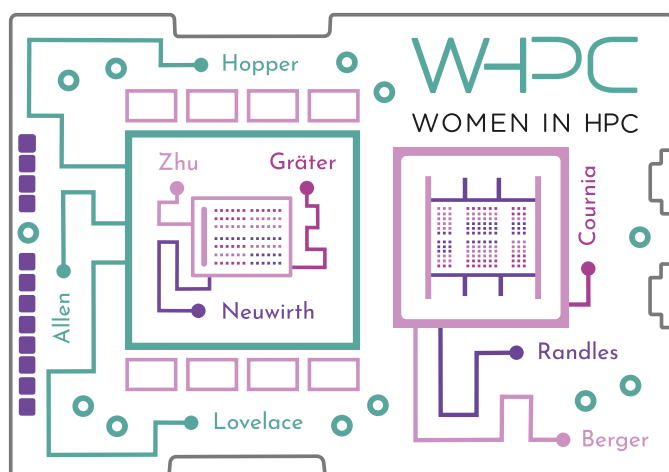
www.software.ac.uk



Integrated architectures, accelerated impact

**Celebrating the women driving innovation
in HPC at ISC 2026**

If you've been following Women in HPC (WHPC) for a while, you will know that we proudly debut a new t-shirt design at each conference we attend. With them we showcase our community to the wider HPC world, signal pride in championing diversity, and the strength of our movement.



For ISC High Performance 2026, we've released an extra special design that aligns with our mission to celebrate the remarkable women in our field.

Designed by Dr Ekaterina Zossimova (FZJ), this artwork is inspired by heterogeneous processors – a technological breakthrough that combines tightly integrated CPUs and GPUs on a single chip, enabling high performance communication, optimised data movement, and increased computational throughput. This more integrated system design has been largely driven by the leading HPC vendors. For example, El Capitan, ranked #1 in the November 2025 Top500 list, is powered by AMD MI300A APUs, while JUPITER Boost, ranked #4, uses NVIDIA GH200 Superchips.

Famously, NVIDIA named its Grace Hopper Superchip in honour of the pioneering computer scientist. Hopper developed the

first compiler, bridging human-readable code and machine language, a breakthrough that fundamentally changed the future of our field. More than 70 years later, she is recognised as one of the foundational figures of modern computer science.

Inspired by this history, our design weaves together CPU and GPU elements with the names of influential women in computing, celebrating their contributions and lasting impact on the field.

Discover the women featured in this design in our WHPC blog, and connect with us at ISC 2026 to receive merchandise celebrating our *Integrated Architectures, Accelerated Impact* theme.

Eleanor Broadway, EPCC
e.broadway@epcc.ed.ac.uk

WHPC

WOMEN IN HIGH
PERFORMANCE
COMPUTING



**Connect with the WHPC
community at ISC 2026!**

Finding Your People in HPC:
A WHPC Community Meet-Up:
2:15–3:00pm, 23 June

Tech Talks by Women in HPC:
7:00–8:30pm, 23 June

Diversity Day: 24 June

Women in HPC Poster Pitch:
2:15–2:45pm, 24 June

Poster Networking Reception:
3:45–5:15pm, 24 June

Super(computing) heroes
Birds of a Feather:
10:45–11:45 am, 24 June

New for 2026

WHPC is collaborating with ISC to improve the representation of women as conference moderators.

**Join us on Slack for live
updates and community
connection during the
conference.**

For more information visit:
<https://womeninhpc.org>



Taking supercomputing to the Edinburgh Science Festival

EPCC's presence at the Edinburgh Science Festival 2026 was another event filled with fun conversations and curiosity (this time with a bit of Lego building!).



A visitor tries our Spintronics activity.
Photo by Ludo Farine.



In April the EPCC stand at the Edinburgh Science Festival welcomed visitors of all ages to explore *how* supercomputers work and *why* they matter, from scientific breakthroughs to the technologies people use every day. We offered three hands-on activities, all designed to be accessible to the general public while also explaining some core concepts of supercomputing.

Logic gates activity: Spintronics

The Spintronics activity proved to be one of the most popular stations throughout the day. Visitors built mechanical systems that emulate electronic circuits using chains, gears and switches, and were tasked with creating logic gates: the building blocks of processors. Some visitors enjoyed constructing increasingly complex setups, and the activity offered a good way of turning these creations into discussions of how “AND” and “OR” logic underpins the operation of computer processors.

AI and ML activity: micro:bits

Our next activity was designed to help demystify AI and machine learning. Using micro:bits, and their in-built accelerometers, visitors created data and then trained an AI model to recognise and classify different physical movements such as clapping, waving, or jumping. Younger children in particular enjoyed trying to trick the models, while adults and older children engaged in deeper discussion about how machine learning works and what it needs to perform well (answer: lots of good quality data!).

Programming activity: Lego maze

Our final activity was to solve a Lego maze. Working in pairs, each participant built a maze and then provided verbal instructions to their partner to recreate their path without seeing it. While primarily aimed to introduce young children to the concept of clear, simple instructions (a key to programming computers efficiently), this activity was a hit with all ages.

Royal Society Summer Exhibition

30 June–5 July, London

EPCC and the University of Edinburgh are among the leading scientific institutions exhibiting at this prestigious event this year.

EPCC's hands-on activities will highlight how supercomputers are used to help address urgent challenges to our health, our security and our planet. Attendance is free, and the Exhibition is suitable for all ages with a range of hands-on activities, talks and interactive exhibits. Do come and visit us if you can!

<https://edin.ac/4d4SLCR>

We also presented an ARCHER2 information desk, with postcards highlighting research completed using the UK National Supercomputing Service, as well as an actual motherboard from the machine itself. We had some great conversations at the information desk, covering everything from why computers get hot, to the technical details of the simulations, and also how supercomputing impacts the environment – something we will be highlighting at our next event in the summer. Keep your eyes peeled!

Darren White, EPCC
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EPCC Outreach website

<https://discover.epcc.ed.ac.uk>



Supporting biodiversity at the ACF



The expansion of data centres such as EPCC's Advanced Computing Facility can result in habitat loss and fragmentation. This in turn can lead to a reduction in wildlife and biodiversity. But careful planning can reduce and even reverse this, allowing data centres to contribute to the Nature Positive goal of halting or reversing nature loss by 2030.



EPCC operates the Advanced Computing Facility (ACF), a high performance computing data centre situated within parkland near Edinburgh. It is surrounded by a range of habitats including woodlands, grasslands and formal areas. The University of Edinburgh is committed to protecting and enhancing the biodiversity of this historic site. EPCC is in turn committed to ensuring that biodiversity at the ACF site is maintained and enhanced nature is a key consideration within all site planning.

Environmental surveys carried out at the site in 2018 and 2022 identified areas of marshy grassland, primarily dominated by soft rush, with some ruderals (pioneer species on disturbed ground). A small number of angelica seedheads exist and some meadowsweet. There is also a scrambling mass of brambles along one of the fences. The site is bounded by woodland, with birch, ash, beech, Scots pine and lime. There is a large area of mature Scots pines and a large cedar on site. Protecting these areas is a central pillar of our biodiversity strategy.

It has been confirmed the site supports breeding birds, and protecting them is key. Insects and flora inhabit the wetland areas and we are also assessing how to increase their biodiversity. Native hedgerows have been planted along security fencing, including blackthorn, hawthorn, beech, hazel, wild cherry, dog rose and field maple. Species-rich meadow areas

have also been developed. Felled wood habitats have been created, providing homes for bees and other insects.

Computer Room 4 of the ACF is currently being extended to accommodate the Next National Supercomputing Service (see article p12) and the biodiversity of the site has been integral to planning work. The wetland area will remain untouched, while an orchard and areas of wildflowers will be added, and gaps will be left in security fences to provide wildlife-friendly corridors across the site. To protect biodiversity, contractor facilities have been moved from an area of wildlife-rich planting to a smaller area of bare ground.

Our surveys, followed by regular review, maintenance and enhancement, have prevented biodiversity loss from the site, and led to some significant improvements. Adding native hedgerows and felled wood habitats has made a difference in the short term, while making biodiversity integral to the planning of the machine room extension has further protected biodiversity on site. Involving staff is also key, with colleagues planting bulbs on site, and plans for an orchard and for accessible paths to encourage appreciation of the site.

Plans are underway to monitor species through a series of on-site cameras and other systems. A further biodiversity survey is planned for 2026.

Paul Clark and Lorna Smith, EPCC
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Wildlife images by Jordan Bell, EPCC.

"Nature Positive is a global societal goal defined as 'halt and reverse nature loss by 2030 on a 2020 baseline, and achieve full recovery by 2050". See: www.naturepositive.org, accessed March, 2026.

EPCC establishes new Sustainability Committee

Computational research has huge potential to address many of society's greatest challenges, including environmental ones. But digital research itself has an environmental impact, and increasingly research organisations are working to understand how to deliver vital, high-impact research while minimising their environmental footprint.

EPCC is already working in this area, not only by carrying out research that will directly benefit the environment, but also through other activities, including its pioneering work into sustainability and biodiversity at the Advanced Computing Facility site where our HPC systems are based (see page opposite).

To cement and strengthen these efforts, EPCC has recently formed a new Sustainability Committee. Bringing together eight members from across EPCC, the committee aims to coordinate existing activities, encourage new ones, and ensure sustainability is a consistent consideration across everything we do.

At the inaugural meeting, the committee agreed to focus on building lasting habits through consistent, incremental progress. To ensure this, work will be organised around three pillars:

- **Education:** Building a shared understanding of sustainability across the organisation through training, seminars, and the sharing of good practice.
- **Advocacy:** Promoting sustainability across EPCC's projects and operations, and ensuring it is considered early in project and bid planning so it becomes part of how all work is done.
- **Animation:** Motivating practical action to improve sustainability, including working towards recognised standards and certifications.

First steps

EPCC has a strong track record in research computing best practice, with many of our services already following recognised ISO standards. Building on this foundation, one of the committee's first actions will be an application to the **Green DiSC** environmental sustainability certificate, developed by Loïc Lannelongue (University of Cambridge) and hosted by the Software Sustainability Institute. Green DiSC is a free, open-source certification framework that helps research organisations understand and reduce their environmental impact in practical, measurable ways.

Looking to the future, the University of Edinburgh provides a Sustainability Framework to guide departments, and the committee will reach out to colleagues across the University to understand how EPCC can best align its efforts with that wider agenda, sharing what it learns along the way.

Kirsty Pringle, EPCC
K.Pringle@epcc.ed.ac.uk

"Being environmentally aware and working towards Net Zero targets is a fundamental principle of how EPCC has sought to operate, both in the services we support and the science we deliver. Having a dedicated Sustainability Committee is another step in ensuring we have environmental considerations at the heart of our organisation."

Ritchie Somerville, Deputy Director of EPCC and committee member

Green DiSC:

www.software.ac.uk/GreenDiSC
University of Edinburgh Sustainability Framework:
<https://sustainability.ed.ac.uk/take-action/framework>





Study HPC with us

We offer Masters' degrees in High Performance Computing (HPC); HPC with Data Science; and Imaging, Vision, and HPC.

EPCC is the UK's national supercomputing centre. We are a major provider of HPC training in Europe, and have an international reputation for excellence in HPC education and research.

Our MSc programmes in High Performance Computing (HPC) and HPC with Data Science have a strong practical focus and provide access to leading edge systems such as ARCHER2 (the UK's National HPC Service), Cirrus and the EIDF GPU Service which supports data processing and AI workloads.

MSc students have the opportunity to undertake their dissertations in a wide range of HPC areas, including collaborations with industry. Recent project partners range from start-ups to multinationals.

Programmes can be undertaken on-campus (full and part-time) and online (part-time).

Optional course choices include modules from the School of Informatics and the wider College of Science and Engineering.

We recently launched a new on-campus MSc programme in Imaging, Vision, and High Performance Computing in collaboration with Heriot-Watt University, UK.

We also offer PhDs related to HPC, computational and data science, parallelism, software sustainability and software engineering.

Our graduates are in high demand in both academia and industry in the UK and abroad.

EPCC is part of the University of Edinburgh, which was ranked 34th among the world's top universities by QS World University in 2026, and placed in the top 30 by THE World University Rankings 2026.

"My MSc at EPCC gave me a strong foundation in HPC and opened doors that continue to shape my career. Today, I apply that knowledge every day in my work on Cloud and AI compute at Arm."
Hristo Belchev MSc in HPC with Data Science graduate, now an Engineer with Arm

