epcc

THE UNIVERSITY of EDINBURGH

Powering business: enabling your journey to the effective use of modern computing technologies

Our expert consultants can quickly integrate with your high-performance computing, data science, and code performance optimisation projects.

Unlock the power of modern supercomputers

Our code performance optimisation service can take your software to the next level. From laptop to local cluster, or from local cluster to the world's largest supercomputers, we can achieve the best possible performance from your software.

Future-proof your software

GPUs are the future of supercomputing. We can help you prepare your code, and your business, for them.

No job too small!

EPCC has a proven track record of working with companies of all sizes, from start-ups to well-established multinationals. We can work with you at any stage within your company or project development lifecycle.

Learn from our experts

EPCC offers a wide range of bespoke short-term courses to improve or refresh your team's skills. Our training ranges from the most basic programming skills to advanced topics such as the efficient use of software parallelisation.

We bring our own compute

For collaborative R&D projects, EPCC can provide access to some of the UK's most advanced and powerful supercomputing capacity and private research cloud infrastructure.

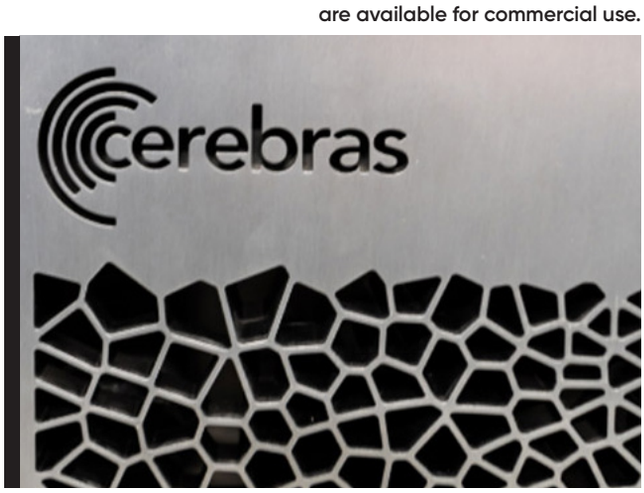
Extract the full value of your data at scale

EPCC's data science expertise covers a wide range of fields, from building and improving databases to extracting information from geospatial or medical images. We can collaborate with you to identify the best way to extract meaningful insights from your data, and to identify and prepare the datasets you need to improve your day-to-day business activities.

Yes, we do AI

We are increasingly focused on machine learning solutions. We provide the expertise to get your AI solution up and running, as well as the novel compute infrastructure that will reduce your AI training time by orders of magnitude.

EPCC's two Cerebras CS-2 AI systems are available for commercial use.



epcc

THE UNIVERSITY of EDINBURGH

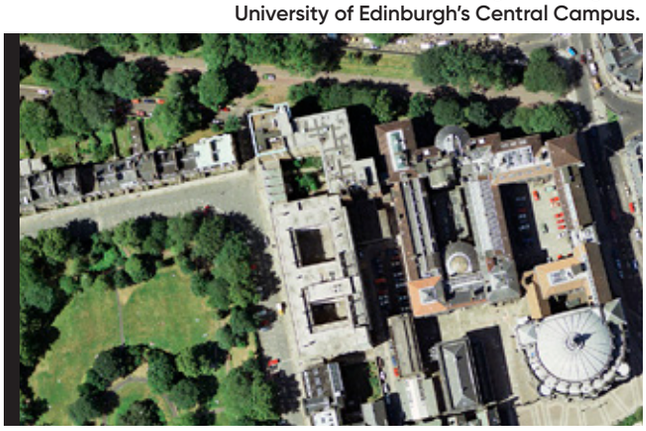
Enabling new industrial research

The National Collection of Aerial Photography (NCAP) is working with EPCC to reduce the expected data footprint of digitising their ever-growing collection of aerial photographs from an estimated 7 petabytes to an estimated 4 petabytes.

NCAP is the custodian of one of the world's largest collections of aerial photography, containing over 30 million images. NCAP and EPCC are working together to develop an algorithm that automatically extracts the original photographic image from the full digital file and discards the extraneous data.

"The partnership between the National Collection of Aerial Photography and University of Edinburgh has transformed our capacity to process millions of high-resolution aerial images that record places throughout the world and key moments in history. Our data-driven innovation with EPCC is making once top-secret imagery accessible and is progressively transforming knowledge and understanding through research that was hitherto unfeasible."
Dr Allan Williams, Head of NCAP

NCAP-hosted archive image showing the University of Edinburgh's Central Campus.



AI-training trial yields impressive results with EPCC's Cerebras CS-2

smartR AI is a Scottish-based consultancy specialising in Natural Language Processing (NLP) applications of AI.

smartR AI and EPCC are working together on an AI trial using the Cerebras CS-2 Wafer-Scale Engine (WSE) system. The results so far have shown a dramatic reduction in AI training times. We believe the impressive results from our collaboration give clear confirmation that the Cerebras CS-2 is a game-changer for training large language models.

"We are very fortunate to be able to work with EPCC on this important LLM and GPT related performance project, and look forward to the potential to incorporate other similar tests with, for example, EPCC's new Graphcore POD64 system."
Oliver King-Smith, Founder and CEO of smartR AI

Strategic Prosperity Partnership with Rolls-Royce

Developing the world's first simulation of a full gas-turbine.

EPCC is leading this ambitious and challenging programme of research funded by EPSRC and Rolls-Royce, in partnership with the University of Cambridge, the University of Oxford, the University of Warwick and the University of Bristol.

By 2030, the goal is to work towards the "virtual certification" of aircraft engines by modelling gas turbines in operation. This requires a unique combination of fundamental engineering and computational science research to address a challenge that is well beyond the capabilities of today's state of the art.

Contact

To discuss how our supercomputing and data services can support your business goals, please contact our Commercial Manager at: commercial@epcc.ed.ac.uk

https://www.epcc.ed.ac.uk/industry-solutions