

## Research Software Engineer

Core Research Facilities

Grade 7 | Full-time | Market Supplement Available



## Welcome

The University of Bath is a fantastic place to work, combining excellence, innovation and exceptional support for staff. In 2024, the University was recognised in multiple categories at the Bath Life Awards, celebrating its cutting-edge research and business ventures. In the 2025 Complete University Guide, the University ranked eighth in the UK, with 25 subjects placing in the top 10, reflecting its academic strength and commitment to high-quality education. In the 2025 QS World University Rankings, Bath maintained its position in the top 150 globally, placing it in the top 10% of universities worldwide. In addition to these rankings, the University's Staff Recognition Awards celebrate those who go above and beyond in enhancing student experiences, supporting peers and strengthening our community. This appreciation for excellence, alongside our vibrant campus and forward-thinking culture creates an inspiring and rewarding environment for career growth.

We are delighted to announce two exciting opportunities within the University's newly established Research Software Engineering Facility within the Core Research Facilities (CRF), launched in May 2025 as part of our commitment to building world-class Digital Research Infrastructure. The RSE team works at the exciting intersection of cutting-edge research and software engineering, collaborating with academics across all disciplines to design, develop and maintain software solutions that accelerate research discovery. As part of the CRF structure, you'll be embedded within a thriving ecosystem of specialist research facilities, working alongside colleagues in advanced fabrication, imaging, chemical characterisation and our new RSE Facility.

Our Research Software Engineering team is dedicated to transforming how researchers across the University utilise computational methods for knowledge advancement. We provide the critical mass of expertise needed to support Bath's growing research portfolio worth millions of pounds, spanning areas from computational chemistry and climate modelling to bioinformatics, Al and machine learning. The facility operates with the same professional service delivery model as our other world-class research infrastructures, ensuring sustainable, high-quality support for our research community. If you're looking for a career where you can make a real impact on groundbreaking research, work with cutting-edge technologies including high-performance computing and Al, and collaborate with world-leading researchers across diverse disciplines, join us in building the future of computational research at Bath.











in the world in rld University ngs 2025





## **Research Software Engineer**

## The Opportunity

The University of Bath is establishing an exciting new Research Software Engineering (RSE) Facility as part of our ambitious digital research infrastructure strategy. This is your opportunity to join a growing team at the forefront of computational research, working across all disciplines to accelerate discovery and innovation.

### Why is This Exciting for You?

This is a unique opportunity to shape the future of research computing at a leading university. You'll be joining a brand-new facility designed to provide critical mass and resilience in RSE support, moving from fragmented provision to a unified, professional service that researchers can truly rely on.

As one of our founding team members, you'll have the chance to:

- Build something from the ground up: Help establish the operational framework, culture, and standards for a new facility
- Work across all disciplines: Support researchers from astrophysics to bioinformatics, materials engineering to Al
- Drive real impact: Your work will directly accelerate research outcomes and enable more ambitious grant applications
- Grow your career: Clear progression opportunities, including potential facility leadership roles

### The Facilities

### A Strategic Investment in Research

The RSE Facility represents a significant strategic investment by the University, moving from ad-hoc support to a professional, sustainable service model. We're addressing real challenges:

### The Challenge We're Solving:

- Researchers struggling with barriers to accessing High Performance Computing
- Limited expert support leading to underutilisation of our cloud infrastructure
- Fragmented RSE provision across different departments, with no resilience
- High staff turnover due to lack of career development opportunities

### Our Solution:

- A unified RSE team within the well-established Core Research Facilities structure
- Critical mass of expertise with clear career progression pathways
- Professional service delivery model with proper cost recovery to ensure sustainability
- Strong links to the wider RSE community and best practices

### Working at the Cutting Edge

The RSE Facility sits at the intersection of software innovation and world-class research infrastructure. You'll have access to:

- State-of-the-art computer resources: Cloud-based HPC via the Nimbus platform, with potential involvement in ISAMBARD 3 supercomputing
- Diverse research portfolio: Supporting a £30M+ research portfolio across all faculties
- Collaborative environment: Working alongside diverse research teams, Research Infrastructure Engineers and world-class technical experts and facilities
- Innovation opportunities: From Al/ML applications to real-time physical testing integration

### **A Service That Makes a Difference**

Our researchers need more than just computing power—they need expert partners who understand their scientific goals and unlock the outputs from their research. You'll:

Enable breakthrough research: Help researchers tackle problems they couldn't address before

**Build lasting relationships:** Become a trusted advisor to research teams across the university

Shape grant proposals: Ensure computational aspects are properly costed and planned, and harness the expertise available

**Drive best practices:** Champion reproducible research and sustainable software development



## **Research Software Engineer**

### The Role

### What You'll Do

### **Project Leadership & Management**

- Lead multifaceted software development projects from conception to delivery
- Coordinate with research teams to understand requirements and manage expectations
- Build business cases for technical projects and navigate approval processes
- Maintain project portfolios with proper documentation and quality assurance

#### **Technical Excellence**

- · Design and implement robust, sustainable software solutions
- Champion best practices in software engineering and reproducible research
- Provide high-level expertise in scientific computing, data analysis, and digital architecture
- Stay current with emerging technologies including Al/ML, cloud computing, and HPC

### **Collaboration & Support**

- Work directly with researchers across all disciplines to enable their research using computational approaches
- Work within a growing RSE team, mentor team members and coordinate code reviews
- Provide training and knowledge sharing to build computational skills university-wide
- Engage with external RSE communities and contribute to best practice development

### **Research & Innovation**

- Contribute to research publications and conference presentations
- Source funding opportunities and contribute to grant proposals
- Build relationships within research communities
- Take a leadership role in promoting RSE activities and impact

### **Career Development**

This role offers genuine opportunities for growth:

Facility Leadership: Team members can put themselves forward to become the facility lead and join the CRF management team

Specialisation: Develop expertise in emerging areas like Al/ML, quantum computing, or digital twins Research Profile: Build your profile through publications, conferences, and community engagement Professional Development: Access to training, conferences, networking and technical development opportunities

### What We're Looking For

### **Essential Requirements**

Demonstrated success leading complex technical projects

Strong experience with multiple research programming languages (Python, C, C++, R, Fortran, etc.)

Knowledge of software development best practices (version control, testing, CI/CD, documentation)

Excellent communication skills and ability to work across diverse research disciplines

### **Desirable Specialisms**

Artificial Intelligence and Machine Learning

High Performance Computing and parallel programming

Data analysis with large datasets

Cloud technologies and system optimisation

Experience mentoring and leading technical teams

#### **Location & Benefits**

**Location:** University of Bath campus with hybrid working options

Benefits: Competitive salary package including

- Market supplement (£7,000 per year)
- Comprehensive pension scheme
- Professional development budget
- Flexible working arrangements
- Access to excellent university facilities



## Committed to Excellence

**Strategic Priority:** RSE support is a priority area for the Vice-Chancellor, who significantly developed the RSE capability at Bristol

**Significant Investment:** Moving RSE provision into the professional CRF structure with proper funding model

**Growth Trajectory:** Clear plans for expansion as the service proves its value and becomes further embedded within research programmes

**Community Focus:** Active engagement with regional and national RSE network

### **Perfect Timing**

You're joining at an exciting moment:

**New Facility:** Be part of establishing something from day one (facility launched May 2025)

**Growing Team:** Moving from isolated individuals to a cohesive, resilient team

**Expanding Demand:** Increasing adoption of AI, big data, and computational methods across all disciplines

**Infrastructure Investment:** Significant ongoing investment in computing infrastructure and facilities

### The Team

You'll be joining a growing team of passionate professionals:

### **Two existing Research Software Engineers:**

Experienced colleagues transferring out of University IT function and Faculty technical support to provide critical mass and continuity

**Research Infrastructure Engineers:** Close collaboration with the team building and maintaining HPC infrastructure

**Broader CRF Community:** Part of a larger community of technical specialists across multiple research facilities

**Academic Partners:** Direct relationships with researchers across all faculties and disciplines

### **Next Steps**

We're looking for enthusiastic professionals who want to make a real difference to research at Bath. If you're excited by the prospect of:

- Building something new and impactful
- Working at the cutting edge of research computing
- Developing your career in a supportive, professional environment
- Making a tangible difference to research outcomes

## Life in Bath

Bath is a city that seamlessly blends history, culture, and modern living. Known for its stunning Georgian architecture and Roman-built baths, this UNESCO World Heritage Site offers a unique living experience.

# Lifestyle and Amenities

Living in Bath means enjoying a vibrant cultural scene, with numerous museums, galleries, and theatres. The city is also famous for its festivals, including the Bath Literature Festival and the Bath International Music Festival. For those who enjoy the outdoors, the surrounding countryside provides beautiful landscapes for walking, cycling, and other recreational activities.

# Transport and Connectivity

Bath is well-connected by public transport, with regular train services to London, Bristol, and other major cities. The city's compact size makes it easy to get around on foot or by bike. Additionally, Bath's strategic location offers convenient access to major business hubs, making it an ideal place for professionals who travel frequently.

# Family and Wellbeing

Bath boasts excellent facilities for maintaining a healthy and balanced lifestyle. The city is home to numerous parks, spas, and wellness centres, providing ample opportunities for relaxation and recreation. For families, Bath offers a safe and nurturing environment with top-rated schools, family-friendly activities, and a strong sense of community.















## Your **Application**

### Application Closing Date - 20th July

We welcome any enquiries about the application process and are happy to arrange informal conversations throughout the recruitment process to discuss the role or University.

### Candidate Shortlisting & Interview Invitations - w/c 21st July

Shortlisted candidates will be informed promptly. We encourage questions at this stage to ensure a transparent and supportive process.

### Interview Arrangements Confirmed - 25th July 2025

All interview details will be confirmed and communicated clearly. We're here to help with any questions to ensure you feel prepared.

### Campus Interview - 14th August

The interview consists of two parts: a standard interview and a presentation. We aim to create a welcoming environment for you to showcase your experience.

### Interview Outcomes Communicated - 16th August

We are committed to informing all candidates of the interview outcome by this date. For those who would like more detailed feedback on their interview performance, we are happy to arrange a follow-up conversation upon request.

### Verbal Offer - w/c 18th August

We encourage open discussion about the offer specifics, role and next steps to ensure you have all the information needed.

### Written Offer - w/c 18th August

We encourage you to review the formal offer carefully and reach out with any questions to ensure your complete understanding.

### Offer Acceptance and Onboarding

Following acceptance, we remain committed to ongoing support and open dialogue as you transition into your new role.

### Continued Support

Our support extends beyond recruitment. We foster open communication and offer guidance as you integrate into our team and University culture.

These dates are proposed and may be subject to change if unforeseen circumstances occur.



Kira Walker
Talent Advisor
talent-advisor-2@bath.ac.uk
https://www.linkedin.com/in/kmaw22/



## **Apply now**

Click "Apply Now," scan the QR code, or visit

https://www.bath.ac.uk/jobs/KW12780



We look forward to receiving your application.

We consider ourselves to be a university where difference is celebrated, respected and encouraged. We have an excellent international reputation with staff from over 60 different nations and have made a positive commitment towards gender equality and intersectionality receiving a <u>Silver Athena SWAN award</u>. We truly believe that diversity of experience, perspectives, and backgrounds will lead to a better environment for our employees and students, so we encourage applications from all genders, backgrounds, and communities, particularly from under-represented groups, and value the positive impact that will have on the university. We are very proud to be an <u>autism friendly</u> university and are an accredited Disability Confident Leader; committed to building <u>disability confidence</u> and supporting disabled staff.