

Candidate Information

Position: Ecosystem Lead (Senior Research Fellow) 0.6 FTE
School/Department: School of Electronics, Electrical Engineering and Computer Science
Reference: 26/113671
Closing Date: Wednesday 28 October 2026
Salary: £52,802 per annum
Anticipated Interview Date: Thursday 19 & Friday 20 November 2026
Duration: Fixed term: Available until 31 August 2029

JOB PURPOSE:

FortranFuture is a three-year, EPSRC-funded NetworkPlus collaboration between investigators at Queen's University Belfast (the lead institution) and University of Southampton, together with a wide range of national and international partner institutions and a growing community of practitioners and researchers. FortranFuture is supported by an independent Accountability and Advisory Board.

FortranFuture aims to:

1. Understand and cultivate an international and vibrant ecosystem of scientists, engineers, research technical professionals, interdisciplinary researchers, industry, government, funding providers and other stakeholders who are all invested in the many science and engineering disciplines that currently depend on Fortran codebases and the Fortran programming language.
2. Undertake foresighting of, and related activities about, the possible futures for this ecosystem.
3. Fund exploratory investigations of areas directly relevant to the ecosystem, e.g., the use of Agentic AI in scientific computing based on Fortran, modernising existing Fortran codebases for new computing architectures, comprehending very large codebases.
4. Develop a roadmap for members of the ecosystem to use in their activities, e.g., as a reference for grant applications, in foresighting and planning.
5. Identify and secure resources to support the future of science and engineering disciplines currently dependent on Fortran.
6. Establish a sustainable community and research network for beyond the funded life-time of the project, e.g., through the UK's Fortran Special Interest Group.

The Ecosystem Lead will take the lead in FortranFuture's work on the ecosystem (item 1), foresighting (item 2), roadmapping (item 4) and future sustainability (item 6), as well as contributing (where appropriate) to the allocation of flexible funding (item 3) and future funding (item 5). FortranFuture includes a flexible fund of approximately £450K, allocated to external mini-projects through a transparent, competitive process. While the financial management of this funding will be the responsibility of a separate project manager, the Ecosystem Lead will contribute to the strategic oversight of the portfolio of funded mini-projects, e.g., how those projects inform items 1, 2 and 4.

MAJOR DUTIES:

1. Generate original ideas and innovative solutions and contribute strategically to the development of the FortranFuture research roadmap, drawing on specialist knowledge of the community and its challenges.
2. Grow new relationships with strategic partners and the community, and foster, develop and enhance relationships with key stakeholders – e.g. funding organisations, national and international academic and industrial partners, and the wider community of practice – to expand and strengthen the network.
3. Lead and coordinate community-building and engagement activities that surface, connect and sustain the global Fortran-based science and engineering ecosystem. This will include, as examples: organising strategic online or in person events, contributing to the development of training materials and documentation, and outreach and engagement with stakeholders (e.g. funders, hardware vendors) and existing online communities (e.g. Fortran-lang, r/Fortran).

4. Contribute to the strategic allocation of the flexible fund. Promote the availability of funding across the community, help shape the funding calls and the coherent portfolio of activity they create, and collate and disseminate results.
5. Lead the project's policy engagement. Develop policy briefs for research funders and government, contribute to strategic research-infrastructure planning, and advocate for the sustainability of scientific software, positioning FortranFuture's findings for maximum policy impact.
6. Lead futures and scenario-planning work. Facilitate the community's envisioning of possible futures for Fortran-based science and engineering – including scenario planning across the range of outcomes (from continued investment through to strategic divestment) – to inform the roadmap for sustainable future; and prepare the network to enact it that roadmap.
7. Develop and maintain a well-represented, inclusive and sustainable community, ensuring and assuring proper representation across the community in line with the project's commitments to ethics and responsible research and innovation, and building the foundations for the community to sustain itself beyond the funded period.
8. Represent the strategic and policy interests of the NetworkPlus in relevant University committees, external forums and community bodies that contribute to the development of strategy and policy.
9. Support research-aligned strategic projects, as required, contributing to wider knowledge-exchange activities through engagement and coordination with academic staff, companies and partner institutions.
10. Carry out any other duties appropriate to the post as may be reasonably requested by the FortranFuture NetworkPlus project lead and co-leads.

ESSENTIAL CRITERIA:

1. A PhD (and/or relevant professional qualification, formal training or demonstrably equivalent professional experience) in a relevant professional or research area, e.g., systems thinking (broadly defined), meta-science, policy, scenario planning, future studies.
2. A sustained record of appropriate outputs and impact, e.g., a publication record which is REF returnable.
3. Substantial relevant experience
4. Experience of successfully developing and cultivating partnerships and alliances at regional, national and international level.
5. Experience of networking and building relationships with a wide range of internal and external stakeholders – preferably including computational scientists and research technical professionals, industry and commerce, government departments and agencies, and business and public bodies – to deliver, influence and impact organisational strategy.
6. Experience of building, growing or coordinating a community, network or membership base, and of organising strategic events and engagement activities.
7. Ability to manage and prioritise time in a dynamic environment.
8. Well-developed analytical skills and an ability to analyse complex information to inform decision making.
9. Ability to communicate both orally and in writing and relate to others at all levels both internally and externally.
10. Excellent report writing and presentation skills with a well-developed critical and analytical approach to reviewing documentation.
11. Excellent inter-personal skills & demonstrable intellectual ability.
12. Ability to travel to meet the requirements of the post.

DESIRABLE CRITERIA:

1. Experience of policy engagement, advocacy or contributing to policy briefs for funders or government at the national and international level.
2. Experience in preparing relevant quantitative and qualitative information for publication and presentation for a range of different audiences and stakeholders.
3. Experience of working with those in the technical, scientific or engineering community, nationally or internationally.
4. Experience of working with stakeholders involved in the Fortran ecosystem, at a national and/or international level.

ADDITIONAL INFORMATION:

FortranFuture currently comprises around 25 institutional partners in the UK and internationally and, separately, a community of 150 practitioners. FortranFuture expects to at least double, and ideally to quadruple, the number of partners and community members. The Ecosystem Lead will be expected to build effective relationships with internal stakeholders and external partners – including academia, industry, funders, policymakers and existing communities such as Fortran-lang and the Society of RSEs – and will foster a coherent, well-represented and sustainable community and network of researchers.

Working closely with the Project Lead and Co-lead, research colleagues, the project manager and other professional services (e.g., in the Centre for Intelligent Sustainable Computing and the School of Electronics, Electrical Engineering and Computer Science) and with the Accountability and Advisory Board, the Ecosystem Lead will generate strategic ideas, cultivate and grow the ecosystem, drive policy engagement and futures/scenario work, and promote and shape the network's flexible funding.

Informal Enquiries to David Cutting (d.cutting@qub.ac.uk)