PhD Policy Internship Opportunity: Future of Compute Review

Role: PhD Internship- Compute (2 posts)

Overview

The Department for Digital, Culture, Media & Sport (DCMS) is offering up to three 6-month internships for suitably qualified and experienced doctoral students to work on the high-profile external review of the Future of Compute in the UK. This was announced by the Chancellor at Spring Statement 2022. Led by an external expert, the review will provide recommendations to form the basis of a long-term plan for the government's approach to compute.

The internships offer the opportunity to gain direct experience of working at the science/evidence/policy interface and contribute to an important and high-profile policy area. The successful candidate(s) will provide technical compute expertise, assess options and draft portions of the review report as part of a dedicated interdisciplinary team.

Applications are welcomed from candidates with a background in computer science, system operations, engineering, or those with experience of using of large scale compute.

Project Description

In the past decade, compute has grown as a critical general-purpose technology for productivity, prosperity, and innovation, making it essential to review the UK compute needs over the next decade. Rather than analysing compute as simply a system for research, this review will view compute as a strategic, all-encompassing resource. With that lens, we should ask what our compute needs will be in the next decade across the entire economy and how we should meet them. To support the Government's Integrated Review ambition for the UK to be a Science and Technology Superpower, we need a targeted approach to compute. The review will provide recommendations to form the basis of a long-term plan for the government's approach.

The Review will assess:
- The importance of compute across a range of sectors.
- International approaches to compute.
- Metrics for UK provision of compute and measures of compute competitiveness.
- The structure of the compute market.

Building on this assessment, and considering future needs and demands, the Review will provide policy recommendations covering themes such as access; provision; infrastructure design; security; enablers; sector needs; and the role of government.

The Role

The successful candidates will provide technical compute expertise, assess options and draft portions of the review report as part of an interdisciplinary team. They will compile and review evidence about current and future applications of compute, and draw on their

technical expertise to support the review's evaluation of opportunities and policy options in order to inform robust, evidence-led recommendations. The work will offer a range of opportunities to enhance and apply research and analytical skills, including evidence synthesis and policy translation.

The posts will offer the successful applicant the opportunity to contribute to an external review that informs the long-term development of a critically important area of policy, and to work with stakeholders at a senior level in government, industry and academia. The postholders will work as part of a busy policy analysis team, offering the opportunity to directly experience, and contribute to, the generation and use of scientific evidence in the policy-making process.

The intern will also benefit from development opportunities offered by DCMS and its Chief Scientific Adviser's Office, including mentoring, shadowing and peer support.

Essential skills

We are looking for eligible PhD students who have the following skills/experience:
- One or more of the following areas of technical expertise:
    - Experience of working on high-performance or novel computing, in fields like machine learning or simulations and models
    - A background in system operations: you may have managed workflows and maintained large scale compute resources
    - An engineering background: you may have designed and built large scale systems, or developed and tested the code bases that run on them
- Experience of conducting literature reviews and awareness of systematic reviews
- Evidence assimilation and synthesis
- Research project planning
- Data analysis skills
- Strong drafting and writing skills
- Strong presentation and communication skills
- The ability to manage relationships and work collaboratively with others.

Internship Details

Duration and timing of internship: 6 months duration, full-time, starting as soon as possible. There is some potential for flexibility.

Eligibility: DCMS welcomes applications from current PhD students that have the right to study and work in the UK. Applicants must also have the support of their academic supervisor when applying. Normally, students will have confirmed or upgraded. Employment is contingent upon successful completion of a background check, which may include, but is not limited to, contacting your professional references, verification of previous employment, addresses, education, and credentials. Students must check their eligibility, particularly where this requires an extension to the studentship period. For further information, applicants should contact the relevant staff at their Research Organisation.
Successful applicants will be required to sign an Non Disclosure Agreement and abide by the Civil Service Code.

Equality & Diversity: The Department for Digital, Culture, Media and Sport prides itself as a modern and diverse workplace, committed to promoting and ensuring equality and valuing diversity. We are committed to being an organisation in which fairness and equality of opportunity is central to the approach in business and working relationships and where the organisational culture reflects and supports these values. Applications are particularly encouraged from underrepresented groups in this field.

Location and travel: The successful candidate will be able to work flexibly from their home location. Some travel to London for face-to-face meetings will be expected. However, all team meetings are conducted in a geographically inclusive way using videoconferencing to facilitate flexible working. Travel and related expenses, whilst in post, will be covered by DCMS.

How will applicants be assessed?

Candidates will be shortlisted on the basis of information provided within the application form. Shortlisted candidates will be invited to an informal video-call interview.
Within the application form, and if invited to interview, applicants will need to demonstrate a detailed understanding of approaches to reviewing and assimilating evidence from different sources. Candidates will be expected to be able to provide examples of where they have demonstrated these skills sets, both at application and at interview stage. Interviews will focus on the candidate's skills and experience in research and evidence assimilation. Candidates will not be asked to give a presentation.

Funding

It is essential that applicants obtain the support of their PhD supervisor in advance and that they ascertain what funding is available to them through their HEI, Doctoral Training Partnership or other sources to support the period of the placement (e.g. UKRI). We recommend that PhD students who are given approval to undertake an internship are in receipt of a stipend at least equivalent to the current UKRI national minimum doctoral rate for the duration of the placement.

While we are currently unable to provide funding for students at this time, we will cover travel and related expenses.

How to apply

Please submit CV, a statement of suitability (max 1000 words) setting out how your skills and experience fit with the role, and completed permissions form by email to amal.tarhuni@dcms.gov.uk. Please also use this email address for any enquiries related to the internship.

The deadline for applications is Friday, 27 May. Applications must be received in full by 1800.

PhD Policy Internship Opportunity: Future of Compute Review

Role: PhD Internship - Economics (1 post)

Overview

The Department for Digital, Culture, Media & Sport (DCMS) is offering up to three 6-month internships for suitably qualified and experienced doctoral students sto work on the high-profile external review of the Future of Compute in the UK. This was announced by the Chancellor at Spring Statement 2022. Led by an external expert, the review will provide recommendations to form the basis of a long-term plan for the government's approach to compute.

The internship offers the opportunity to gain direct experience of working at the science/evidence/policy interface and contribute to an important and high-profile policy area. The successful candidate(s) will provide technical compute expertise, assess options and draft portions of the review report as part of a dedicated interdisciplinary team.

Applications are welcomed from candidates with a background in economics, or subjects involving quantitative analysis, ideally with experience working on the economics of compute systems or digital sectors.

Project Description

In the past decade, compute has grown as a critical general-purpose technology for productivity, prosperity, and innovation, making it essential to review the UK compute needs over the next decade. To support the Government's Integrated Review ambition for the UK to be a Science and Technology Superpower, we need a targeted approach to compute. The review will provide recommendations to form the basis of a long-term plan for the government's approach.

The Review will assess:
  ● The importance of compute across a range of sectors.
  ● International approaches to compute.
  ● Metrics for UK provision of compute and measures of compute competitiveness.
  ● The structure of the compute market.

Building on this assessment, and considering future needs and demands, the Review will provide policy recommendations covering themes such as access; provision; infrastructure design; security; enablers; sector needs; and the role of government.

The Role

The successful candidate will provide technical expertise to lead the economic assessments that will underpin the assessment of potential policy options, and draft portions of the review report as part of an interdisciplinary team. They will compile and review evidence about current market conditions; model future compute supply and demand, including at a sectoral level; undertake cost/benefit analysis; and support the review's evaluation of opportunities

and policy options in order to inform robust, evidence-led recommendations. The successful candidate is also expected to work closely with consultants who will provide specialist economic input. The work will offer a range of opportunities to enhance and apply research and economic analysis skills, including evidence synthesis and policy translation.

The post will offer the successful applicant the opportunity to contribute to an external review that informs the long-term development of a critically important area of policy, and to work with stakeholders at a senior level in government, industry and academia. The postholder will work as part of a busy policy analysis team, offering the opportunity to directly experience, and contribute to, the generation and use of scientific and economic evidence in the policy-making process.

The intern will also benefit from development opportunities offered by DCMS and its analytical community, including mentoring, shadowing and peer support.

Essential skills

We are looking for eligible PhD students who have the following skills/experience:
- At a minimum, a first or upper second class (2:1) honours degree in economics or a subject area involving quantitative analysis.
- A postgraduate degree in economics and/or experience applying econometric analysis and quantitative modelling.
- Experience of conducting literature reviews and awareness of systematic reviews
- Evidence assimilation and synthesis
- Research project planning
- Data analysis skills
- Strong drafting and writing skills
- Strong presentation and communication skills
- The ability to manage relationships and work collaboratively with others.

Internship Details

Duration and timing of internship: 6 months duration, full-time, starting as soon as possible. There is some potential for flexibility.

Eligibility: DCMS welcomes applications from current PhD students that have the right to study and work in the UK. Applicants must also have the support of their academic supervisor when applying. Normally, students will have confirmed or upgraded. Employment is contingent upon successful completion of a background check, which may include, but is not limited to, contacting your professional references, verification of previous employment, addresses, education, and credentials. Students must check their eligibility, particularly where this requires an extension to the studentship period. For further information, applicants should contact the relevant staff at their Research Organisation.
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