

Candidate Information

Position:	Research Fellow
School/Department:	Mathematical Sciences Research Centre
Reference:	22/110472
Closing Date:	Monday 12 December 2022
Salary:	£29,619 - £42,155 per annum
Anticipated Interview Date:	Thursday 12 or Friday 13 January 2023
Duration:	24 months

JOB PURPOSE:

To play a lead role as an active member in the research collaboration between the Strategic Investment Board (SIB), on behalf of the NI public sector, and the Mathematical Sciences Research Centre at Queen's University Belfast. This Data Analytics Research and Exploitation (DARE) project provides the opportunity to assist in the planning and delivery of cutting edge data science research and application to deliver a Population Health Model for the NI Public Health Agency.

While the preference is to appoint a Postdoctoral Research Fellow, consideration may also be given to an experienced Research Assistant.

MAJOR DUTIES:

1. Problem definition with clients: undertaken through desk-based research, direct client liaison, stakeholder consultations, etc.
2. Solution design/wire-framing: undertaken through desk-based research, agile development processes.
3. Data sourcing and data management; data audit, specification, requests, data cleaning, matching, data warehousing and data protection.
4. Analysis: research and development of analytical solutions, data exploration, statistical modelling and testing.
5. Solution development: coding solutions in R, Shiny, and/or other appropriate environment.
6. Solution deployment: deployment of solution into client environment, training, feedback, version control, solution maintenance.
7. Reporting: Write up results of own work and contribute to the production of research reports, high impact journal publications and future funding proposals.
8. Present work as appropriate at local, national and international conferences or seminars.
9. Read academic papers, journals and textbooks to keep abreast of developments in data analytics and related disciplines.

ESSENTIAL CRITERIA:

1. Research Fellow: Have at least a MSc in Statistics, Data Analytics, Operational Research, Mathematics or Computing.
2. Have or about to obtain a PhD in Statistical Modelling or closely related discipline.
3. Research Assistant: Have at least a MSc in Statistics, Data Analytics, Operational Research, Mathematics or Computing.
4. Research Fellow: At least 3 years' relevant research experience to include:
 - Experience in the design and delivery of data analytics using R, SAS, Matlab or similar
 - Ability to communicate research findings in professional written reports and/or publications.
5. Research Assistant: At least 1 year relevant research experience in data analytics using R, SAS, Matlab or similar.
6. Ability to contribute to broader management and administrative processes.
7. Sufficient breadth and depth of statistical models.
8. Ability to communicate complex information clearly in both written and spoken English.
9. Ability to interact with research colleagues and support staff.
10. Evidence of strong presentation skills and ability to prepare clear and concise presentation materials.
11. Good oral, written and presentation skills.
12. Demonstrate intellectual ability.
13. Commitment to continuous professional development.

DESIRABLE CRITERIA:

1. Experience of application development (e.g. Shiny) and UX.
2. Experience in business consulting, problem definition, solutions design, agile methodologies.
3. Previous experience presenting statistical concepts at conferences or seminars.