

Candidate Information

Position: School/Department: Reference: Closing Date: Salary: Anticipated Interview Date: Duration: Research Fellow Data Analytics Mathematics and Physics 19/107954 Friday 3 January 2020 £33,797 to £40,322 per annum Friday 17 January 2020 3 Years

JOB PURPOSE:

To conduct research into Statistical Data Analytics which will focus and implement the research primarily in the field of healthcare 4.0 and health analytics, developing a strong research profile in Data Analytics and play a role in building the capability in Data Analytics in the Mathematical Sciences Research Centre and more broadly across the University.

MAJOR DUTIES:

- 1. To undertake research in Statistical Data Analytics that is of international quality in terms of originality, significance and rigour with an emphasis on implementation in healthcare 4.0 and health analytics.
- 2. Analysis: research and development of analytics solutions, data exploration, statistical modelling and testing.
- 3. Data sourcing and data management; data audit, ethics requests, data specification, data requests, data cleaning, matching, data warehousing and data protection.
- 4. Implementation using: R, Shiny, Python and/or other appropriate software.
- 5. Dissemination of research through the preparation and publication of research papers and giving talks / conference presentations.
- 6. Contribute to background research and preparation of grant funding applications.
- 7. Collaboration and development of a strong engagement with healthcare providers and data custodians.
- 8. Carry out routine administrative duties as requested, e.g. arranging research group meetings, maintaining research group website.
- 9. Contribute to the delivery of the MSc Data Analytics through the provision of lab classes, marking and supervision of student placement projects.
- 10. Where feasible, to engage in knowledge transfer and innovation activity and to demonstrate tangible research impact.

Planning and Organising:

- 1. Organise own day to day research activities, meetings, dissemination and classes.
- 2. Ensure regular reporting and meeting with Professor Adele Marshall.
- 3. Be able to work using agile practises.

Resource Management Responsibilities:

1. Provide guidance as required to Healthcare Data Analytics PhD students and MSc Data Analytics students.

Internal and External Relationships:

- 1. Liaise with QUB colleagues and support staff on routine matters.
- 2. Make internal and external contacts to develop knowledge and understanding and form relationships for future collaboration.
- 3. Work closely with external data providers both locally and internationally.
- 4. Attend and contribute to relevant meetings.

ESSENTIAL CRITERIA:

1. Hold or be about to obtain a PhD in, Statistics or Data Analytics or closely related discipline.

- 2. At least 3 years relevant research experience.
- 3. Experience of conducting research in the field of data analytics or contributing research as part of a large data analytics project.
- 4. Experience using Data Analytics and Statistical packages and programming languages such as R, or Python.
- 5. Record of publication of internationally excellent research outputs in Data Analytics (commensurate with career stage).
- 6. Evidence of giving research presentations.
- 7. Ability to interact with research colleagues and support staff.
- 8. Ability to analyse and communicate effectively.
- 9. Ability to communicate and present research to a broad audience both from the Data Analytics research area and within public sector organisations such as healthcare providers, and to industry.
- 10. Ability to communicate complex information effectively.
- 11. Ability to communicate effectively in English, both orally and in writing.

DESIRABLE CRITERIA:

- 1. Membership of learned societies such as RSS and/or IEEE.
- 2. Data Analytics research experience applied to healthcare 4.0.
- 3. Experience assisting in the delivery of taught modules in Data Analytics at Masters Level.
- 4. Experience supervising project students.
- 5. Experience in writing grant applications and securing research funding.
- 6. Evidence of conference presentations of research at International conferences.