UNIVERSITY OF WARWICK

Job Description

Job Title	Research Fellow
Department	Statistics
Grade	FA6

Job purpose (a brief summary of the role)	Applications are invited for two post-doctoral research associates to work with Thomas Berrett in the Department of Statistics at the University of Warwick. These are 3-year positions that are part of the larger European Research Council project HeDiStat: Statistical theory and methodology for the combination of heterogeneous and distributed data. The aims of the project are to develop statistical methodology and theory for modern data science problems arising from fields such as semi-supervised learning, missing data, differential privacy, robust statistics, causal inference and distributed learning, with a focus on robust methods for nonparametric and high-dimensional settings.
Duties and responsibilities	The successful applicants will be expected to carry research on theoretical and methodology aspects of statistics, focussed particularly on nonparametric and high-dimensional settings and problems arising from fields such as those listed above. You will be required to work independently as well as collaboratively. This position is part of a larger project through which PDRAs will be recruited to join Thomas Berrett's research group. The successful applicant will have the opportunity to engage with group events and collaborate with other group members. The position comes with a generous travel allowance, and the successful applicant can expect to attend conferences and workshops. **Research** • To conduct high-quality research relevant to the project, as described above. • To work collaboratively with other researchers on the project. • To prepare research papers for submission to leading relevant journals and/or conferences. • To attend and present research findings and papers at academic and professional conferences, and to contribute to the external visibility of the group and the university. • To act as a source of information to other members of the group. • May contribute to preparing proposals and applications to external bodies, e.g. for funding and contractual purposes, to support a developing research agenda. • Continually update own knowledge and understanding in field or specialism. **Administration and Other Activities** • To participate in relevant professional activities, such as attending departmental research seminars. • To participate in research workshops and other events. • To engage in personal and career development.

Person Specification

The Person Specification focuses on the essential and desirable knowledge, skills, experience and qualifications required to undertake the role effectively. This is measured by (a) Application Form, (b) Test/Exercise, (c) Interview, (d) Presentation.

Essential Criterion No.	Essential Criterion Description	Measured by
E1	Possession of a PhD or equivalent in a relevant scientific discipline (e.g. mathematics, statistics, computer science, engineering).	A
E2	Significant theoretical and methodological experience in at least one of nonparametric statistics, high-dimensional statistics and robust statistics.	A,C & D
E3	Ability to initiate, develop and deliver high quality research and to publish in peer reviewed journals.	A,C & D
E4	Excellent effective communication (oral and written) skills, including the ability to write for publication, present research proposals and results, and represent the research group at meetings.	A,C & D
E5	Excellent interpersonal skills.	A & C
E6	Ability and enthusiasm to work independently and as a member of a team and contribute positively to a collegial team environment.	A,C & D
E7	A commitment to promoting equality, diversity and inclusion.	A & C

Desirable Criterion No.	Desirable Criterion Description	*Measured by*
D1	Good computational skills (e.g. in R or Python).	A & C
D2	Experience with or interest in at least one of the topics from semi-supervised learning, missing data, differential privacy, robust statistics, causal inference and distributed learning.	A,C & D
D3	Experience with releasing open-source code.	A,C & D