



Job Description

This form summarises the purpose of the job and lists its key tasks. It is not a definitive list of all the tasks to be undertaken as those can be varied from time to time at the discretion of the School, in consultation with the postholder.

Job title: Research Officer

Department: Statistics

Accountable to: Professor Qiwei Yao

Job Summary

This is a research project funded by Andurand Capital Management (ACM) on forecasting oil prices based on quantitative methods. The primary goal of this project is to explore and to investigate the quantitative methods for forecasting price movements of oil and the related derivatives in the time horizons between one day to a few months. The distinctive feature is the integration of the cutting edge statistical and machine learning methods from LSE and the expert knowledge and experience on financial markets from ACM. The research officer appointed will work 4 days per week at LSE and one day per week at ACM, under the direction of Professor Qiwei Yao, Dr Yining Chen (LSE), and Mr Pierre Andurand (ACM).

Applicants should have a PhD, or be working towards the completion of a PhD, in statistics or a related subjects, and should demonstrate clear research achievement or potential for such achievement in statistics, and experiences in analysing real data. The project also involves extensive computation and data manipulation. Experience in time series research is desirable but not essential.

Duties and Responsibilities

Range of Research Activities and Responsibilities

- To take initiatives in the planning of research, conducting research projects and programmes independently and as part of a team
- Analysing and researching complex ideas, concepts and theories and applying appropriate methodologies
- To collect and manage data, including unstructured data (such as texts).
- To conduct data analysis using R and other programming languages, and to formulate new hypotheses
- Contributing creative solutions to research challenges
- To ensure the validity and reliability of data at all times
- Writing up research for publication in a variety of modes, including peer reviewed journals
- To present research finding to colleagues and to people in financial industry
- To promote the reputation of the research group, the department and the School



Activities relating to administration and management and/or School service may include:

- To undertake appropriate administration tasks
- To attend relevant meetings
- To comply with relevant School policies, including financial regulations, health and safety policy, information systems security, and intellectual property rights
- To undertake any necessary training and/or development
- Any other duties commensurate with the grade of the post as directed by the line manager

All of the above subject to the contractual obligations imposed by the external funding agency and with the agreement of the grant-holder, Principal Investigator and/or Head of Centre.

Note

The LSE has a progressive pay structure that rewards you with annual pay increases up to a certain level as you develop in your role. We also provide for further reward past this point in the form of further pay increases based on exceptional performance.

Flexibility

To deliver services effectively, a degree of flexibility is needed, and the post holder may be required to perform work not specifically referred to above.

Equality and Diversity

To uphold the School's commitment to equality of respect and opportunity, as set out in the [Ethics Code](#), we will treat all people with dignity and respect, and ensure that no one will be treated less favourably because of their role at the School, age, sex, disability, gender identity, race, religion or belief, sexual orientation, marriage and civil partnership, pregnancy and maternity, or social and economic background. For the full Equity, Diversity and Inclusion policy statement, please see the [EDI website](#).

Environmental Sustainability

The post holder is required to minimise environmental impact in the performance of the role, and actively contribute to the delivery of the LSE Environmental Policy.