



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 in Mathematical Optimisation

Department: Mathematics

Accountable to: Head of Department

Job Summary

The successful applicant will be a Research Officer contributing to the EPSRC New Investigator Award “New perspectives towards Woodall’s conjecture and the Generalised Berge-Fulkerson conjecture”, working with Principal Investigator Dr Ahmad Abdi. The project will take an optimisation-inspired approach towards the conjectures and related problems.

The successful applicant will contribute to the research objective of the project, by conducting substantive individual research and developing new results in the theory of combinatorial optimisation and graph theory. The main objective of the EPSRC project is to make meaningful progress towards the conjectures, by taking advantage of recent results and the synergies between the two problems.

Duties and Responsibilities

Range of Research Activities and Responsibilities

- Conducting substantive research into complex problems, ideas, concepts or theories and applying appropriate methodologies.
- Developing and carrying forward a coherent research strategy in their discipline which has national and international impact.
- Manage their own research and administrative activities, with guidance if required.
- Writing up research for publication in a variety of modes including peer reviewed journals.
- Presenting research papers at conferences.
- Contributing to the organisation of conferences, seminars and workshops.

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

- Playing a constructive role in the life of the research group and Department.

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

Flexibility

To deliver services effectively, a degree of flexibility may be required in the duties performed in order to meet the exigencies of service. Job roles may also naturally develop over time and ongoing substantial changes to a role will be discussed between line managers and their staff, with job descriptions updated as and when appropriate.

**Equity, Diversity and Inclusion (EDI)**

LSE is committed to building a diverse, equitable and truly inclusive university. All posts (and post holders) will seek to ensure diversity and inclusion, while opposing all forms of unlawful and unfair discrimination on the grounds of age, disability, gender identity, marriage and civil partnership, pregnancy and maternity, race, nationality, ethnic or national origin, religion or belief, sex and sexual orientation, or social and economic background.

Ethics Code

Posts (and post holders) are assumed to have a responsibility to act in accordance with the School's Ethics Code and to promote the principles and values that the Code enshrines. The Ethics Code clearly states that the whole LSE community, including all staff, students, and governors of LSE, are expected to act in accordance with the principles which are set out in the Code. As such you are required to read and familiarise yourself with it. The School's Effective Behaviours Framework is designed to support this Code. It sets out examples for the six behaviours that all staff are expected to demonstrate, these can be found on the following link: [click here](#)

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.