

Person Specification

This form lists the essential and desirable requirements needed in order to do the job.

Applicants will be shortlisted **solely** on the extent to which they meet these requirements.

Job title: Research Officer in Algorithms and Optimisation

Department/Division: Department of Mathematics Accountable to: Head of Department

Competency	Criteria	E/D
Knowledge and Experience	Successful completion (or near completion) of PhD in a discipline relevant to optimisation, such as Mathematics, Computer Science, or Operations Research.	E
	Demonstrates comprehensive knowledge and experience in the theoretical and algorithmic understanding of fundamental problems in optimisation.	E
	Evidence of developing a body of good quality publications, in well-recognised peer reviewed outlets, through independent original research.	E
	Research expertise in some of the following topics: efficient algorithms for linear and convex programming, and the geometry of linear and convex programs approximation algorithms (especially based on convex relaxations) fundamental network design problems, (e.g., Steiner tree, robust network design, the travelling salesman problem) strongly polynomial computability for network optimisation and other problems probabilistic / game-theoretic aspects of optimisation, e.g., equilibrium computation.	D
Communication	Excellent written and oral communication skills, including an ability to place one's specialist work within a broader context and to communicate research findings effectively to a range of audiences.	E
Investigation, analysis and research	Ability to analyse and research complex ideas, concepts or theories.	E



Planning and organisation	Ability to take a significant role in pursuing the activities and objectives of the research project.	E
	Evidence of good time and workload management and planning skills, setting priorities and committing to delivery within deadlines.	D
Teamwork and motivation	A commitment and demonstrated ability to work as part of a collaborative research team in assisting the smooth running of the project.	D
	Ability to take responsibility for, and work independently on, specific project tasks, consulting and reporting to colleagues appropriately.	D
	A flexible and creative attitude to work.	D
	Willingness to travel within the United Kingdom and beyond to conduct research and attend conferences.	D
Liaison and networking	Evidence of experience of participation in academic events.	D
	Demonstrated ability to initiate and build and maintain a collaborative network of contacts.	D

E - Essential: requirements without which the job could not be done.
 D - Desirable: requirements that would enable the candidate to perform the job well.