



## 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
<b>Knowledge and Experience</b>	Successful completion (or near completion) of PhD in a discipline relevant to optimisation, such as Mathematics, Computer Science, or Operations Research.	E
	Ability to demonstrate research interests and comprehensive knowledge and experience in areas relevant to the project ScaleOpt: the theoretical foundations of discrete and continuous optimization, with a particular focus on strongly polynomial computability.	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: <ul style="list-style-type: none"> <li>efficient algorithms for linear and convex programming, and the geometry of linear and convex programs;</li> <li>strongly polynomial computability;</li> <li>mean payoff games and tropical linear programming;</li> <li>polynomial-time exact and approximation algorithms for network optimization problems;</li> <li>market equilibrium computation.</li> </ul>	D
<b>Communication</b>	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
<b>Investigation, analysis and research</b>	Ability to analyse and research complex ideas, concepts or theories.	E



<b>Planning and organisation</b>	Ability to take a lead 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.	E
<b>Teamwork and motivation</b>	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, EU and beyond to conduct research and attend conferences.	D
<b>Liaison and networking</b>	Evidence of experience of participation in academic events.	D
	Demonstrated ability to initiate and build and maintain a collaborative network of contacts, including with external bodies.	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.**