

**PERSON SPECIFICATION**

**MARS Senior Research Software Engineer**

**Ref: 0444-24**

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| Criteria | Essential/ Desirable | Application Form/ Supporting Statements/ Interview |
| A PhD in Mathematics or Computer Science with a substantial mathematical content, or equivalent experience in a related mathematical field | Essential | Application Form/Supporting Statement/Interview |
| A minimum of 5 years post-graduation experience in a research software engineering environment, including some experience as a professional Research Software Engineer, with a strong track record in research software development leadership. | Essential | Application Form/Supporting Statement/Interview |
| Demonstrable ability to publish, including the ability to produce high-quality academic writings as evidenced by publication in applied mathematics, AI, and statistical journals. | Essential | Application Form/Interview |
| Proficiency in multiple programming languages commonly used in research (e.g. Python, C++, R, Julia, Rust, Haskell) | Essential | Application Form/Supporting Statement/Interview |
| Proficiency in modern DevOps, including version control systems like Git, and administration of services supporting collaborative coding (e.g. Github, GitLab) | Essential | Application Form/Supporting Statement/Interview |
| Experience of the academic research software development cycle, including design, development, deployment, maintenance, and user support. | Essential | Supporting Statement/Interview |
| Ability to prioritize tasks across multiple projects toward meeting objectives within agreed time and resource constraints | Essential | Interview |
| Excellent communication skills including: face-to-face, telephone, electronic and written communications, cultural sensitivity, tact and diplomacy | Essential | Application Form/Interview |
| Experience of relationship management across a range of activities | Essential | Application Form/ Supporting Statement/ Interview |
| Capacity to play an integral role in MARS and its management and to engage with all programme members (academic and other) | Essential | Interview |
| Ability to support junior Research Software Engineers, and supporting the careers of aspirant PhD students in the field. | Essential | Application Form/Supporting Statement/Interview |
| Experience of teaching programming languages at introductory or advanced university level | Desirable | Statement/Interview |
| Ability to support public engagement events through innovative software development. | Desirable | Statement/Interview |
| Willingness to travel within the UK to support MARS activities | Desirable | Interview |
| Experience of maintaining web and social media content | Desirable | Application Form/ Supporting Statement/Interview |

* **Application Form** – assessed against the application form, curriculum vitae and letter of support. Applicants will not be asked to answer a specific supporting statement. Normally used to evaluate factual evidence e.g. award of a qualification. Will be “scored” as part of the shortlisting process.
* **Supporting Statements** - applicants are asked to provide a statement to demonstrate how they meet the criteria. The response will be “scored” as part of the shortlisting process.
* **Interview** – assessed during the interview process by competency based interview questions, tests, presentation etc.