UNIVERSITY OF WARWICK

Job Description

Job title	Research Software Engineer
Department	Computer Science
Grade	FA6

Job purpose (a brief summary of the role)	To conduct cutting-edge research in Machine Learning and Natural Language Processing to design, prototype, and evaluate novel approaches for the analysis of REF Impact Case Studies (ICS), and to engineer simple user interfaces that exposes the models to non-technical users.
Duties and responsibilities	1. Conduct high-quality research in Machine Learning and Natural Language Processing. 2. Design, prototype, and rigorously evaluate models and algorithms; run experiments and ablations; ensure reproducible code and datasets. 3. Publish results in leading international AI/NLP/ML conferences and journals. 4. Present research findings at top venues and internal seminars; engage with project stakeholders to communicate progress and gather feedback. 5. Implement and maintain a simple user interface that exposes models to non-technical users across departments. 6. Assist in the organisation of research meetings/workshops relevant to the project and contribute fully to departmental research activities. 7. Engage in continuous professional development. The duties and responsibilities are not intended to be an exhaustive list but provide guidance on the main aspects of the job. You will be required to be flexible in your duties.

Person Specification

The Person Specification focuses on the essential and desirable knowledge, skills, experience and qualifications required to undertake the role effectively. This is measured by (a) Application Form, (b) Test/Exercise, (c) Interview, (d) Presentation.

Essential Criterion No.	Essential Criterion Description	Measured by
E1	Good quality research publications.	A,B & C
E2	Ability to initiate, develop, and deliver high-quality research.	A,C & D
E3	Ability to initiate, develop, and deliver simple user interface.	A,C & D
E4	Potential to publish excellent work in the relevant research area.	A,C & D
E5	Effective communication skills.	A,C & D
E6	Good interpersonal skills.	A,C & D
E7	Ability to work independently and as part of a research team.	A,C & D

Desirable Criterion No.	Desirable Criterion Description	*Measured by*
D1	Possession of a PhD or an equivalent qualification (or close to completion) in Computer Science, Mathematics, or a related discipline.	A
D2	Excellent quality research publications.	A,C & D
D3	Strong background in machine learning and natural language processing.	A,C & D
D4	Prior experience of research in text analysis and classification.	A,C & D
D5	Prior experience of engineering lightweight interfaces for ML models.	A,C & D