

PERSON SPECIFICATION

Senior Research Associate in Artificial Intelligence and Digital Humanities

Vacancy Ref: A3759

Criteria	Essential/ Desirable	* Application Form/ Supporting Statements/ Interview
Possess a postgraduate degree (MSc/PhD) or equivalent in a relevant research area.	Essential	Application Form
Capable of carrying out research independently and under direction as part of a team.	Essential	Application Form / Supporting Statement
Demonstrate an ability to work co-operatively and flexibly with colleagues including undertaking appropriate collaborative and interdisciplinary research.	Essential	Supporting Statement / Interview
Being able to present their work to academic and non-specialist audiences, including at work meetings and conferences.	Essential	Supporting Statement / Interview
Experience in: <ul style="list-style-type: none"> • Python programming (libraries like Numpy, Pandas, Scikit-learn) and/or R • Machine Learning (Convolutional/Recurrent, Transformers, GAN/cGAN, BigGAN networks) • Supervised/Unsupervised algorithms (annotations, training/evaluation, Transfer Learning) • Object detection and recognition. Object to Object interaction. • Data augmentation libraries • Keras/Tensorflow or Pytorch libraries • Computer Vision (OpenCV library) • Classification/Regression algorithms. • SSD models (Inception, Mobilenet, YOLO) • Images processing techniques (filters, morphological analysis, histograms, 	Essential	Application Form / Supporting Statement

<p>vectorial images, contours, homography transform)</p> <ul style="list-style-type: none"> • Image to Image translation, Style transfer techniques 		
<p>Skills and/or experience on:</p> <ul style="list-style-type: none"> • NLP (Natural Language Processing) • NLTK / SpaCy Libraries • OCR (Ex. Tesseract) & HTR • Word embedding (word2vec, fasttext), Named Entities Recognition (NER) • Text mining (keywords and topic extraction) • Information Retrieval techniques (Latent Semantic Indexing, tf-idf) 	Desirable	Supporting Statement / Interview
<p>Experience in publishing or ability to write outputs (usually journal articles) individually and/or collaboratively from research.</p>	Desirable	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 eg 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 either competency based interview questions, tests, presentation etc.