

JOB DESCRIPTION

Job Title:	Data Scientist (KTP Associate) for Deep Learning and Image, Audio and Video Processing
Department / Unit:	Department of Computer Science
Job type	Full-Time, Fixed-Term, Professional Services
Grade:	RHUL 7
Accountable to:	Prof Li Zhang
Accountable for:	n/a
Purpose of the Post	
<p>To carry research activity in the field of deep learning and image, video, audio, and signal processing in collaboration with the research group. Assisting with laboratory organisation, experimental procedures, analysis of results, journal/conference publication development, teaching of undergraduate and graduate students.</p> <p>Specialised knowledge required to be able to set up equipment for and run experiments and tests for the applicable research area.</p>	
Key Tasks	
<ul style="list-style-type: none"> • Establish the extent and quality of the survey data the inspectorate holds, using a range of statistical techniques to explore the dataset • Identify any ethical issues that may limit access to the data and suggest solutions • Using initiative and creativity to identify areas for research, developing new research methods and extending the research portfolio • Identify any practical and technical issues that require to be resolved and suggest solutions. Identify any specific limitations on data-sharing (in relation to specific datasets, types of analysis etc) and/or additional work required to enable wider access • Pilot, refine and optimise mathematical and computational techniques with limited supervision from the PI • Take a leading role in overcoming methodological problems that arise during the project lifespan, and keep the PI up to date with the project's progress • Formulate and test new hypotheses arising from the data, where relevant 	

- Provide technical support for designated research area including maintenance of equipment, lab supplies, databases and webpages, ensuring that all work is carried out in accordance with statutory and Royal Holloway regulations as appropriate.
- Set up and perform experiments in close collaboration and consultation with relevant academic/research colleagues.
- Record, analyse and write up results, maintaining a permanent record of the methodologies and the experiments.
- Compose research manuscripts for peer-reviewed journal/conference publication
- Prepare and present findings of research activity to colleagues and at scientific meetings
- Contribute to the preparation of grant applications, research presentations and publications as requested.
- Undergo continued personal professional development

Other Duties

The duties listed are not exhaustive and may be varied from time to time as dictated by the changing needs of the University. The post holder will be expected to undertake other duties as appropriate and as requested by their manager.

The post holder may be required to work at any of the locations at which the business of Royal Holloway is conducted.

Internal and external relationships

The following list is not exhaustive, but the post holder will be required to liaise with: Students, other members of staff within the school/department and University, academics in other institutions and, where relevant, industrial, or professional contacts



PERSON SPECIFICATION

Details on the qualifications, experience, skills, knowledge and abilities that are needed to fulfil this role are set out below.

Job Title: Knowledge Transfer Partnership (KTP)
Associate

Department: Computer Science

	Essential	Desirable	Tested by Application Form/Interview/Test
Knowledge, Education, Qualifications and Training			
MSc in relevant subject area	X		Application Form/Interview
PhD in relevant subject area (or near completion of - it is expected that the appointee will have their PhD awarded within 4 months of the start date)		X	Application Form/Interview
Proven knowledge of research techniques and methodologies	X		Application Form/Interview
Demonstrable comprehensive knowledge in the subject area	X		Application Form/Interview
Experience of working in industry in a research capacity		X	Application Form/Interview
Skills and Abilities			
Ability to teach/demonstrate research methods and techniques	X		Interview
Excellent communication skills	X		Interview
Proven ability to analyse and write up data	X		Application Form/Interview
Ability to present complex information effectively to a range of audiences	X		Interview
Use of webpage software to create engaging copy and images		X	Application Form/Interview
Experience			
Evidence of a publication record in good quality publications	X		Application Form/Interview
Experience of supervising undergraduate students		X	Application Form/Interview

Evidence of contributing to research bids	X		Application Form/Interview
Practical experience of applying specialist skills and techniques required for the role	X		Application Form/Interview
A commitment to equality, diversity, and inclusion	X		Application Form/Interview