



Candidate Information

Position:	Research Assistant in Multimedia Search
School/Department:	School Office (Elect, Elect Eng & Comp Sci)
Reference:	22/109496
Closing Date:	Monday 14 February 2022
Salary:	£28,756 - £33,309 per annum
Anticipated Interview Date:	Friday 25 or week commencing Monday 28 February 2022
Duration:	Available until 31/03/2024

JOB PURPOSE:

To be an active member of the Multimodal Video Search by Examples (MVSE) research project assisting in the planning and delivery of research activity in search technology so that the overall research objectives of the project are met.

The researcher will work closely with relevant staff at the BBC to understand their current multimedia search technologies and their needs for new search technologies. The researcher will work closely with investigators and researchers in all teams of the project consortium in research, development and dissemination in relation to the project research programme. The researcher will also have the opportunity to develop valuable inter-personal skills through working with a wide variety of people in the multi-partner project consortium. The researcher is expected to visit other partners at least once per year.

MAJOR DUTIES:

1. Read academic papers and books to keep abreast of developments.
2. Review and appreciate existing state of the art techniques for multimedia search, with particular focus on segmentation, representation, ranking and rank fusion.
3. Research and develop state of the art multimedia segmentation and representation techniques to meet the needs of the project.
4. Research and develop state of the art ranking and rank fusion techniques to meet the needs of the project.
5. Write and publish research papers in collaboration with the project teams.
6. Present regular progress reports on research to the project teams or to external audiences to disseminate and publicise research findings.
7. Assist the principal investigator to coordinate the project when required.
8. Contribute to introductory courses when required, for example, on the use of research methods and equipment.
9. Carry out undergraduate supervision/demonstrating/teaching duties when required.
10. Carry out routine administrative duties when required, e.g. arranging research group meetings, maintaining research group website.
11. Carry out any other duties designated by a line manager and which fall within the general ambit of the post.

Planning and Organising:

1. Plan own day-to-day activity within the framework of the project research programme.
2. Contribute to the planning of research tasks, reports and publications etc.

Resource Management Responsibilities:

1. Ensure research resources are used in an effective and efficient manner.
2. Provide guidance as required to support staff and any students who may be assisting with research.

Internal and External Relationships:

1. Liaise with research colleagues and support staff on routine matters.
2. Make internal and external contacts to develop knowledge and understanding and form relationships for future collaboration
3. Attend and contribute to relevant meetings.

ESSENTIAL CRITERIA:

1. Degree or equivalent in computer science or a closely related discipline.
2. Relevant experience to include:
 - Demonstrable programming experience in Python, MATLAB, C++ or Java.
 - Research and practical experience in AI techniques.
 - Demonstrable experience of successfully contributing to a project.
 - Demonstrable experience of delivering outputs from previous work or research activities.
3. Ability to contribute to method improvement where required.
4. Ability to work independently.
5. Ability to analyse and communicate effectively.
6. Ability to interact with people effectively.
7. Experience of contributing to a team environment.

DESIRABLE CRITERIA:

1. Have, or about to obtain a Postgraduate qualification and/or PhD in Computer Science or a closely related discipline.
2. Research experience in multimedia search.
3. Research experience in deep learning.
4. Research experience in fusion, ranking.
5. Experience of taking initiatives.
6. High level of motivation and organization.
7. Strong interpersonal and relationship building skills.