Job description

Date last reviewed: 06/06/2012

Faculty/Directorate: Technology, Design and Environment

Department: Department of Computing and Communication Technologies

Title of post: Postdoctoral Research Assistant in gait and activity recognition

Grade of post: 7

Post number: 18353

FT or % P/T: FT

Permanent/Temporary: Temporary

Principal location of work: Wheatley campus

Immediate line manager: Dr Fabio Cuzzolin

Staff managed: None

Qualifications required for post: Ph.D. in Computer Science or related fields.

Experience required for post: Substantial experience in computer vision or machine learning research, as a doctoral student. An adequate research record in computer vision or machine learning. A potential for conducting research independently. Coding proficiency in C++ and Matlab.

Overall purpose of post: To undertake research activity within the framework of an EPSRC grant on “Tensorial modelling of dynamical systems for gait and activity recognition”.

Main duties:

1. Work closely with the Head of the Research Group and others on formulating an appropriate theoretical framework based on tensorial analysis and metric learning of generative dynamical models to include:
   - selecting an adequate feature selection and extraction stage;
   - implementing the approach by coding the different algorithms involved in C++/Matlab;
   - running tests on all the available benchmark datasets in gait ID/action recognition;
   - disseminating the results via publication to top vision conferences;
   - developing a dedicated web site on the project
2. Day to day responsibility for various research projects including financial monitoring of consumables required for the project(s), liaison with collaborators, monitoring progress towards objectives/targets
3. Responsibility for planning and carrying out experimental work, keeping accurate laboratory notebooks, data analysis & interpretation and report writing
4. Assist with the preparation of papers for publication and make presentations at meetings and/or conferences
5. Conduct literature searches and reviews
6. Report on a regular basis to the Head of the Research Group
7. Assist other researchers in the Research Group (e.g. student, visitors), as required.
8. Assist with the general running of the research group on a day-day basis as necessary and required
9. Undertake any teaching duties that may be agreed with the Head of the Research Group and in line with any funding body’s rules/regulations, e.g. tutorials, specialist lectures/practical’s,
10. Contribute to the research culture of the School
11. Observe all School and University H&S rules and regulations
12. Any other duties given by the Head of the Research Group commensurate with the level and responsibility of this post.

Closing date: 3 August 2012

Ref:485/18353/AW

Please return completed application forms to: Directorate of Human Resources, Oxford Brookes University, Wheatley Campus, Wheatley, Oxon OX33 1HX.
**Person specification**

**Faculty/Directorate:** Faculty of Technology Design and Environment

**Title of post:** Postdoctoral research assistant in gait and activity recognition

**Starting salary:** £24,520, rising annually to £26,779

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<tr>
<th>Specification</th>
<th>Essential</th>
<th>Desirable</th>
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<tbody>
<tr>
<td>1. Education/Training</td>
<td>Postdoctoral qualification in Computer Science or related fields, or studying for PhD</td>
<td>A Ph.D. in Computer Vision or Machine Learning</td>
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<td>2. Relevant Experience</td>
<td>Substantial experience in computer vision or machine learning research, as a doctoral student. An adequate research record in computer vision or machine learning.</td>
<td>A few years of experience as an independent research/postdoc. Research experience in gait identification or action/activity recognition. A good research record in action or identity recognition. Teaching experience at undergraduate and/or postgraduate levels</td>
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<td>3. Relevant Skills/Aptitudes</td>
<td>Potential to conduct research independently. Coding proficiency in C++ and Matlab. Ability to develop a simple html web site. Ability to work as a member of a team Ability to work independently</td>
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<td>4. Special Requirements</td>
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