Job Title: Dyson Research Fellow  
Department/Division/Faculty: Dyson Robotics Laboratory, Department of Computing. Faculty of Engineering  
Campus location: South Kensington  
Job Family/Level: Research Fellow  
Responsible to: Professor Andrew Davison  

Key Working Relationships (internal): Staff and students within the Department of Computing, in particular the Dyson Robotics Laboratory and Robot Vision Research Group, and external collaboration partners  
Contract type: Full time, fixed term until 30/06/2024, to start ASAP  

Purpose of the Post  
The Dyson Robotics Laboratory is an elite research centre at the Department of Computing, Imperial College London. In close collaboration with Dyson Ltd., we focus on forward-looking research in robot vision and perception with the goal of developing the breakthrough technology which will lie at the heart of new categories of robotic products for the home and beyond. The laboratory is directed by Professor Andrew Davison, and employs a team of post-doctoral researchers, PhD students, and visiting Robotics engineers and scientists from Dyson and academic institutions around the world. Members of the laboratory will collaborate with the Robot Vision group and other teams within Imperial College.  

We are looking to recruit two post-doctoral researchers to form part of the backbone of the laboratory’s research capability. We are looking for outstanding researchers who have the ability to take long term ownership and leadership of research projects within the lab, working closely with the director and other colleagues in the lab to advance the state of the art in practical robotics driven by computer vision.  

Key Responsibilities  
- To plan and carry out research in accordance with the project aims.  
- To take long-term ownership and leadership of research projects within the lab, working closely with the directors and other colleagues in the lab to advance the state of the art in practical robotics driven by computer vision.  
- To liaise closely with the project partners and the directors.  
- To publish and be visible at the top international venues in robotics and computer vision.  
- To develop working demonstrators of new capability, which could feed into Dyson's R&D operations.  
- To generate and display the results and interpret their physical implications.  
- To write progress reports and prepare results for publication and dissemination via presentations and the internet.  
- To maintain accurate and complete records of all findings.  
- To collaborate with everyone working on the project.  
- To attend group meetings, project meetings, relevant workshops and conferences as necessary.  
- To co-supervise postgraduates involved in the project or related activities. To provide assistance and guidance to these students.  
- To direct the work of small research teams including undergraduate and postgraduate students.  
- To keep abreast of developments in the computer vision fields and apply them where appropriate; and to develop contacts in these areas.
Job Description

- To present his/her ideas and findings at meetings and in writing, including conference and journal papers; occasionally travelling to conferences to present papers; and occasionally giving informal presentations to the group and maintaining internal documentation.
- To perform occasional demonstrations of the lab’s work to potential students and/or industrial and or academic collaborators.
- To undertake any necessary training as required
- Any other duties commensurate with the grade of the post as directed by the line manager / supervisors

Where Imperial or funder conditions necessitate, you will be required to complete timesheets for your work on projects in a timely manner.

Other Duties

- To undertake any necessary training and/or development
- To undertake appropriate administration tasks
- To attend relevant meetings
# Job Description

## Person Specification

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<thead>
<tr>
<th>Requirements</th>
<th>Essential (E)/Desirable (D)</th>
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<td><strong>Candidates/post holders will be expected to demonstrate the following</strong></td>
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### Education

- **Research Fellow**: PhD degree (or equivalent) in a directly relevant area such as computer vision and/or robotics  
  - **Desirable (D)**
- **Research Assistant**: Close to completion of your PhD (or equivalent) If you have not yet been awarded your PhD you will be appointed as Dyson Research Assistant with a fixed salary of £45,000 per annum  
  - **Essential (E)**

### Experience

- An outstanding record of international publications  
  - **Essential (E)**
- Demonstrable major skills in building and engineering working systems in robotics and/or computer vision, preferable with a real-time emphasis.  
  - **Essential (E)**
- Strong background in modern 3D computer vision  
  - **Essential (E)**

### Knowledge

- Demonstrable interest and track record in the practical software skills which enable high performance real-time applications  
  - **Essential (E)**
- An outstanding record of international publications and demonstrable major skills in building and engineering working systems in robotics and/or computer vision, preferable with a real-time emphasis  
  - **Essential (E)**

### Skills & Abilities

- Ability to conduct a detailed review of recent literature  
  - **Essential (E)**
- Proven ability to program and maintain state of the art toolkits  
  - **Desirable (D)**
- Creative approach to problem-solving  
  - **Essential (E)**
- Excellent verbal communication skills and the ability to deal with a wide range of people  
  - **Essential (E)**
- Excellent written communication skills and the ability to write clearly and succinctly for publication  
  - **Essential (E)**
- Ability to organise own work with minimal supervision  
  - **Essential (E)**
- Ability to prioritise own work in response to deadlines  
  - **Essential (E)**
- Advanced computer skills, including word-processing, spreadsheets and the Internet  
  - **Essential (E)**
- Ability to direct the work of a small research team and motivate others to produce a high standard of work  
  - **Essential (E)**

### Other

- Willingness to work as part of a team and to be open-minded and cooperative  
  - **Essential (E)**
- Flexible attitude towards work  
  - **Essential (E)**
- Discipline and regard for confidentiality and security at all times  
  - **Essential (E)**
- Willingness to undertake any necessary training for the role  
  - **Essential (E)**
- Willingness to travel both within the United Kingdom and abroad to conduct research and  
  - **Essential (E)**
Please note that job descriptions cannot be exhaustive, and the post-holder may be required to undertake other duties, which are broadly in line with the above key responsibilities.

Imperial College is committed to equality of opportunity and to eliminating discrimination. All employees are expected to follow the Imperial Values & Behaviours framework. Our values are:

- Respect
- Collaboration
- Excellence
- Integrity
- Innovation

Employees are also required to comply with all College policies and regulations paying special attention to: Confidentiality, Conflict of Interest, Data Protection, Equal Opportunities, Financial Regulations, Health and Safety, Information Technology, Smoking, Private Engagements and Register of Interests. They must also undertake specific training and assume responsibility for safety relevant to specific roles, as set out on the College Website Health and Safety Structure and Responsibilities page.

The College is a proud signatory to the San-Francisco Declaration on Research Assessment (DORA), which means that in hiring and promotion decisions, we evaluate applicants on the quality of their work, not the journal impact factor where it is published. For more information, see https://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-evaluation/

The College believes that the use of animals in research is vital to improve human and animal health and welfare. Animals may only be used in research programmes where their use is shown to be necessary for developing new treatments and making medical advances. Imperial is committed to ensuring that, in cases where this research is deemed essential, all animals in the College’s care are treated with full respect, and that all staff involved with this work show due consideration at every level. http://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-integrity/animal-research/

Committed to equality and valuing diversity, we are an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Disability Confident Employer and work in partnership with GIRES to promote respect for trans people.