1 Advertisement

Post Title: Post doctoral Research Fellow
School/department: Engineering and Informatics/Engineering and Design
Hours: Full time or part time hours considered up to a maximum of 1.0 FTE
Requests for flexible working options will be considered (subject to business need).
Contract: fixed term until 31 March 2024
Reference: 7282
Salary: starting at £34,304 to £40,927 per annum, pro rata if part time
Placed on: 22 November 2021
Closing date: 17 December 2021. Applications must be received by midnight of the closing date.
Expected start date: As soon as possible

The Department of Engineering and Design, University of Sussex invites applications for a postdoctoral Research Fellow position in the field of mechanical design/robotics.

The position is for a fix term of 29 months and it involves a collaborative project with researchers from the University of Tokyo to design and develop a novel variable impedance actuator (VIA) for robotics applications.

The main application of the research is the development of robotic manipulators for decommissioning and dismantling operations at Sellafield and Fukushima nuclear power plants.

Please contact Dr Romeo Glovnea at R.P.Glovnea@sussex.ac.uk, Tel.: 01273 678911 for informal enquiries.

The University is committed to equality and valuing diversity, and applications are particularly welcomed from women and black and minority ethnic candidates, who are under-represented in academic posts in Science, Technology, Engineering, Medicine and Mathematics (STEMM) at Sussex.

Please note that this position may be subject to ATAS clearance if you require visa sponsorship.

For full details and how to apply see our vacancies page

The University of Sussex values the diversity of its staff and students and we welcome applicants from all backgrounds.
2. **The School / Division**

Please find further information regarding the school/division at [http://www.sussex.ac.uk/engineering/](http://www.sussex.ac.uk/engineering/)

3. **Job Description**

**Job Description for the post of:**  
Post Doctoral Research Fellow

**Department:**  
Engineering and Design

**Section/Unit/School:**  
Engineering and Informatics

**Location:**  
Falmer, Brighton

**Grade:**  
7

**Responsible to:**  
Dr R Glovnea

The postdoctoral research fellow will be part of the Robotics and Mechatronics Systems Research Group. They will undertake research work, under the supervision of the academic investigators, on the design and modelling of a mechanical Variable Impedance Actuator (VIA) that can be used in the joints of robots. The researcher will also be responsible for designing and building a test rig to check the dynamic performance of the actuator. The research fellow will be expected to work closely with a PhD student on the integration of the VIA into a robotic manipulator designed for specific tasks in nuclear decommissioning. Application of the VIA to other robotic applications will also be explored. The researcher will have the opportunity to do a limited number of teaching hours in the department should they wish to enhance their skills in this area.

The position is funded by the EPSRC and is a part of an international collaboration between the University of Tokyo in Japan and the University of Sussex. The researcher is expected to collaborate closely with the Japanese team through regular meetings and the exchange of deliverables and reports.

4. **Person Specification**

**ESSENTIAL CRITERIA**

1. Normally educated to doctoral level, or other equivalent qualification, or appropriate level of experience, as appropriate to the discipline (see role-specific criteria below).

2. Evidence of engagement in high-quality research activity.

3. Excellent presentation skills, with the ability to communicate effectively, both orally and in writing, with students, colleagues and external audiences.

4. Ability to work individually on own initiative and without close supervision, and as part of a team.
5. Ability to exercise a degree of innovation and creative problem-solving.
6. Excellent organisational and administrative skills.
7. Ability to prioritise and meet deadlines.
8. Excellent IT skills.

ESSENTIAL ROLE-SPECIFIC CRITERIA
1. Excellent skills in mechanical design
2. Familiar with software packages used in mechanical simulations

DESIRABLE CRITERIA
1. Experience in soft or nuclear robotics is desirable but not essential
2. Emerging track record of high-quality publications in reputable journals and other appropriate media of similar standing.
3. Experience of generating research or knowledge exchange income.