CANDIDATE BRIEF
Research Support Technician in Robotics,
Faculty of Engineering and Physical Sciences

Salary: Grade 4 (£22,197 – £24,715 p.a.)
Reference: EPSEE1110
Closing date: Wednesday 2\textsuperscript{nd} August 2023

We are open to discussing flexible working arrangements
Research Support Technician in Robotics,
School of Electronic and Electrical Engineering.

Do you want to support world-leading research in surgical and rehabilitation robotics? Do you want to help develop systems for robotic object manipulation and grasping? Are you interested in the development of mechatronic technologies for healthcare?

We are looking for a professional and proactive individual with a good team-working ethos to support our research in the new interdisciplinary robotics research suite located in the new Bragg building. This space provides extensive new laboratory space and facilities for research teams from the Schools of Electronic and Electrical Engineering, Mechanical Engineering and Computer Science working on surgical robotics and healthcare technologies, rehabilitation and assistive robotics, and robotic learning and manipulation.

The ~550 m$^2$ space is spread over 2 floors and is equipped with a range of innovative robots and research tools including rapid prototyping machines, medical-grade robotic arms, haptic interfaces, a variety of precision linear stages and force sensors, endoscopy systems, omnidirectional mobile robotic bases, a variety of robotic grippers and hands, marker-based tracking systems, high-resolution imaging and multi-axis load-testing. An extraction hood and a vacuum oven allow for silicone and other soft polymers casting and moulding.

You will be directly involved with our advanced robotic platforms, including the Intuitive Surgical daVinci Research Kit (dVRK) and our magnetic flexible endoscope (MFE). You will help design and develop robotic manipulation systems for picking and packing in warehouses. You will contribute to the development and evaluation of mechatronic systems for healthcare like intelligent insoles to monitor foot pressures in people with diabetes.

What does the role entail?

As Research Support Technician, your main duties will include:

- Helping with the construction of new electro-mechanical laboratory equipment and the purchasing of necessary components as directed and required by academic staff;
• Working alongside colleagues to take responsibility for the day-to-day operation of laboratory facilities and managing the use of equipment and materials needed for research;
• Assisting with health and safety matters of a laboratory, including, but not limited to: inductions, equipment training, maintaining risk assessments and other health and safety records;
• Keeping effective records of laboratory information and providing clear, understandable information to students and other staff;
• Maintaining an up-to-date list of stock components and ordering components as required for research projects;
• Providing general support to staff and students, communicating with others both verbally and in writing;
• Opportunities to work with multidisciplinary research teams in the development of healthcare related research.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As Research Support Technician, you will have:
• A-Levels in Computing, or other relevant Engineering subjects (e.g. Robotics, Mechatronics), or a BTEC Level 3 qualification in an Electronic/Electrical Engineering subject, or an equivalent qualification (including a higher-level qualification in a relevant area);
• Hands-on experience in the use of electro-mechanical laboratory fabrication and test equipment, including: prototyping tools (e.g. soldering iron, drills, 3D printers), bench power supplies, digital oscilloscopes;
• Experience with electronic circuits, either in construction of prototype circuits or component-level diagnostics and repairs, and a good understanding of electric circuits and basic electronic theory;
• Hands-on experience in embedded programming of micro-controller systems for data acquisition and/or control;
• Working knowledge of CAD software to support 3D prototyping and manufacturing of basic components (in Engineering workshops);
• Experience with creating and using MS Office software;
• Developed organisational skills with the proven ability to prioritise work, manage time well and deliver against demanding deadlines;
• Enthusiasm and initiative when working independently, but also as part of a wider team;
• A proven ability to readily learn new techniques, practices and procedures;
• Proven communication skills - both written and oral.

You may also have:
• Experience of working in a research environment;
• Experience with health and safety procedures, for example, conducting risk assessments;
• City & Guilds (or equivalent) in PAT testing;
• Familiarity with medical device development.

How to apply

You can apply for this role online; more guidance can be found on our How to Apply information page. Applications should be submitted by 23.59 (UK time) on the advertised closing date.

Contact information

To explore the post further or for any queries you may have, please contact:

**Pietro Valdastri**, PhD, Chair in Robotics and Autonomous Systems
Tel: +44 (0)113 343 3706
Email: P.Valdastri@leeds.ac.uk

Additional information

**Faculty and School Information**
Further information is available on the research and teaching activities of the [Faculty of Engineering & Physical Sciences](#), and the [School of Electronic and Electrical Engineering](#).
**A diverse workforce**
As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Engineering and Physical Sciences we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian and ethnically diverse people; people who identify as LGBT+; and people with disabilities. Candidates will always be selected based on merit and ability.

The Faculty of Engineering and Physical Sciences are proud to have been awarded the Athena SWAN Silver Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our [equality and inclusion webpage](#) provides more information.

**Working at Leeds**
We are a campus-based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our [Working at Leeds](#) information page.

**Information for disabled candidates**
Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found on our Accessibility information page or by getting in touch with us at hr@leeds.ac.uk.

**Criminal record information**

**Rehabilitation of Offenders Act 1974**
A criminal record check is not required for this position. However, all applicants will be required to declare if they have any ‘unspent’ criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.