UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Assistant in Sensing Systems for Healthcare, Faculty of Engineering

Salary: Grade 6 (£27,025 – £32,236 p.a.)

Reference: ENGME1205

Closing date: 16 June 2019

Fixed-term for 9 months

We will consider flexible working arrangements

Research Assistant in Sensing Systems for Healthcare
School of Mechancial Engineering, Faculty of Engineering

Do you want to make a difference by applying engineering to medical applications for improved patient treatment? Are you able to think outside the box to find innovative yet practical solutions? Do you want to join an established team of researchers, clinicians and industry partner?

The Surgical Technologies Group (Mechanical Engineering) have been developing soft load sensing technologies and exploring how they can be applied to improve healthcare interventions for a range of conditions. In this role you will be undertaking research to integrate load sensing technology into a commercially available wearable medical aid, with the aim of providing the wearer with personalised feedback and the clinician with valuable usage data. This role is an exciting opportunity to work on novel medical technology in a team of academic, clinical and industry partners.

Holding an undergraduate or masters degree in Mechatronics or Robotics (or a closely allied discipline), or equivalent experience, you will have a strong background in design, fabrication and experimental evaluation of electronic sensing systems, microprocessors and PCB circuits, and experience in medical engineering device design.

What does the role entail?

As a Research Assistant, your main duties will include:

- Contributing to the development and application of low cost sensing techniques to enable the creation of a wearable medical device;
- Assisting in the evaluation of the developed system through lab and clinical based validation studies;
- Traveling to research and industry meetings across the UK;
- Writing technical reports and documentation, undertaking literature reviews and preparing papers for publication, with guidance as necessary;
- Working both independently and as part of a larger team of researchers and stakeholders;
- Supporting research activities, including contributing to research results and outputs and to the generation of independent and original ideas, ensuring a successful programme of investigation;

- Collating and analysing data to inform the direction and progression of the research project;
- Participating in the research group and presenting research output where appropriate;
- Contributing to the research culture of the School, where appropriate;
- Continually updating your knowledge, understanding and skills in the research field.

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 a Research Assistant, you will have:

- An undergraduate or masters degree in Mechatronics or Robotics (or a closely allied discipline), or equivalent experience;
- A strong background in design, fabrication and experimental evaluation of electronic sensing systems, microprocessors and PCB circuits;
- Experience in medical engineering device design;
- Good interpersonal and communication skills, both written and verbal and the ability to communicate effectively with a wide range of stakeholders;
- Well-developed analytical skills;
- Good time management and planning skills, with the ability to meet tight deadlines;
- A proven ability to work well both individually and in a team;
- The ability to work unsupervised and to use your own initiative.

You may also have:

- Experience of contributing to the writing of papers and reports for publication;
- Familiarity in working with external engineering industry.

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:

Dr Pete Culmer, Associate Professor
Tel: +44 (0)113 343 2141
Email: P.R.Culmer@leeds.ac.uk

Additional information

Faculty and School Information
Further information is available on the research and teaching activities of the Faculty of Engineering and the School of Mechanical Engineering.

A diverse workforce
The Faculty of Engineering is 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
Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our Working at Leeds information page.

Candidates with disabilities
Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our Accessibility information page or by getting in touch with us at disclosure@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.