



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Automation of Textile Instrument, School of Design,
Faculty of Arts, Humanities and Cultures



Salary: Grade 7 (£33,199 – £39,609 p.a.)

Grade and salary will be based on your qualifications. It is likely that an appointment will be made no higher than £38,460 p.a. due to funding limitations.

Reference: AHCDE1074

Closing date: 25 August 2019

Full time

Fixed-term for 12 months



Future Fashion Factory

Research Fellow in Automation of Textile Instrument School of Design Faculty of Arts, Humanities and Cultures

Are you a researcher with experience in software development for automation of instrument looking to develop your career in an academic environment? Would you like to be part of a team working on a project to develop an intelligent instrument that can help digitisation of fabric properties and digital communication of fabric tactile and aesthetic properties?

When shopping online, you probably would like to know how the garments would feel like. However, communication of fabric qualities such as touch feel and garment drape around our bodies are far from we expect, this is even more of a problem when you buy clothes and textile products online because you do not have chance to touch and feel the fabric materials.

You will work closely with our industry partner as a member of the multidisciplinary Future Fashion Factory team in the University of Leeds, on a project funded by the UK Government to develop an instrument that can help communicate fabric tactile and aesthetic properties. With the help of academics across School of Design and School of Electronic and Electrical Engineering as well as our industrial partner, you will help re-shape our new instrument and develop it into an intelligent system by combining software development, automation, computation, sensing and artificial intelligence.

You will have a Master or PhD or be close to completion of those degrees in electronic and electric engineering, automation, software, computer science or a related field.

What does the role entail?



As a Research Fellow your main duties will include:

- Undertaking research in the development of software for an intelligent automated instrument for communicating fabric tactile properties in relation to human sensory feel;
- Working with textile specialist, mechatronic engineers and other team members to develop a robust integrated instrument system for control, data acquisition and data processing for communicating fabric properties;
- Planning, collating and analysing relevant information to produce document for the system;
- Preparing research reports and paper for publications under supervision;
- Planning and co-ordinating day-to-day project work with supervisors and colleagues, ensuring good progress is maintained and work is undertaken in a systematic way;
- Providing support to existing staff and team members;
- Providing guidance, assistance and supervision, as required, to student projects;
- Liaising, coordinating and collaborating with internal and external project partners with regards to organising and coordinating work programme;

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 Fellow you will have:

- The motivation and enthusiasm for developing a career in an academic environment;
- An MSc or PhD (PhD either to be completed or close to completion meaning the initial version of the thesis has been submitted) in electronic and electric engineering, automation, software, computer science, mathematics or a related field or be close to completion;
- Excellent software skills in C# and C++ and any other high-level languages for software development;
- Excellent interpersonal and communication skills;
- Experience of academic writing including reports and journal papers;



- Other IT skills appropriate to support the research project and relevant teaching activities;
- The ability to work towards deadlines.

You may also have:

- Knowledge and/or experience of Matlab/R/Python for data analytics and/or machine learning;
- Knowledge and/or experience of PLC and sensors;
- Knowledge or experience in mechatronics;
- Knowledge and/or experience of database or web-driven database development;
- Demonstrable experience of working with external partners;

Experience of working independently and as part of multidisciplinary teams.

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 Ningtao Mao (School of Design)

Tel: +44 (0)113 343 3792

Email: n.mao@leeds.ac.uk

Dr He Wang (School of Computing)

Tel: +44 (0)113 343 5767

Email: h.e.wang@leeds.ac.uk

Dr Zhiqiang Zhang (School of Electronic and Electrical Engineering)

Email: z.zhang3@leeds.ac.uk

Additional information



Further information about the [School of Design](#), [School of Computing](#), [School of Electronic and Electrical Engineering](#)

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.

