CANDIDATE BRIEF
Research Assistant in Cognitive Science
Faculty of Medicine and Health

Salary: Grade 6 (£26,495- £31,604 p.a.)
Due to funding restrictions appointment will not be made above £26,495.
Reference: MHPSY1037
Closing date: 16 February 2018
Interviews are scheduled to take place on 26 February 2018
Fixed-term, available from 1 April 2018 – 20 September 2019
Research Assistant in Cognitive Science
School of Psychology
Perception-Action-Cognition Group

Do you want to apply your knowledge of cognitive science to help improve the decision-making capabilities of today's robots? Do you have an interest in using Virtual Reality systems to conduct laboratory-based human performance experiments? Would you like to join an exceptional team of collaborators in psychology and computer science and engineering working on a novel approach to the development of robotic systems?

We are seeking a highly motivated individual to join the Perception-Action-Cognition group at University of Leeds to participate in an EPSRC funded project in their “Human-Like Computing” initiative.

This is one of two roles on an 18-month feasibility study entitled “Human-like physics understanding for autonomous robots” to investigate whether data garnered from how humans manipulate objects in cluttered environments can be used to improve robots' abilities to do the same. You will be responsible for running large-scale experiments in virtual reality with human participants. Data from these experiments will be used to create control algorithms that will be implemented and tested in a grasping robot. You will also contribute to evaluating the efficacy of this human-inspired method to system development against traditional computational approaches.

What does the role entail?

As a Research Assistant, your main duties will include:

- Planning and organising a programme of work to ensure that experimental goals are delivered according to a timetable agreed by the project team;
- Responsibility for participant recruitment and data collection on large-scale human-performance experiments (full training to be provided);
- Data entry, checking and monitoring of the research participant database;
- Liaising with other full time researcher on the project, who will be responsible for performing machine learning analysis on the data you collect in Virtual Reality designed experiments;
- Development of Standard Operating Procedures (SOPs) for Virtual Reality experiments with human participants;
- Keeping detailed progress records;
- Contributing to the supervision of undergraduate students as appropriate
- Attending and contributing to project group meetings with the research team (consisting of the second researcher, the Principal Investigator, and 5 co-Investigators);
- Contributing to the presentation of regular information on research progress and outcomes to the research team.

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.

You will report to Dr Faisal Mushtaq, University Academic Fellow in Health Engineering & Professor Mark Mon-Williams, Chair in Cognitive Psychology.

**What will you bring to the role?**

You will have:
- A BSc in Psychology, Neuroscience, Cognitive Science, Computer Science or Mechanical Engineering (or proven equivalent experience);
- Knowledge and experience of using Virtual Reality systems;
- Strong mathematical background and interest in learning to programme;
- The ability to prioritise work and manage time flexibly and effectively;
- The ability to work as part of a team including an enthusiastic, pro-active and co-operative approach;
- The ability to use your initiative as appropriate;
- The ability to work with a wide range of professionals across a range of disciplines in academia and industry;
- A flexible attitude to working practices;
- An ability to work independently, under pressure and to deadlines.
You may also have:

- An MSc in Psychology, Neuroscience, Cognitive Science, Computer Science or Mechanical Engineering
- Experience of using cross-platform game engines (e.g. Unity, Unreal Engine) for developing virtual environments;
- Experience in preparing peer-reviewed publications for neuroscience/computer science (or related) journals;
- Experience of conducting experiments with human participants;
- Effective organisational skills demonstrated by an ability to manage a research project involving complex data sets.

**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 Faisal Mushtaq, School of Psychology**
Tel: +44 (0)113 343 6640
Email: f.mushtaq@leeds.ac.uk

**Additional information**

The research team on this project includes Professor Tony Cohn (PI, Computing), Professor Mark Mon Williams (Psychology), Dr Mehmet Dogar (Computing), Dr Matteo Leonetti (Computing), Dr Faisal Mushtaq (Psychology), Dr He Wang (Computing).

Find out more about the [Faculty of Medicine and Health](#)

Find out more about the [School of Psychology](#)

Find out more about the [School of Computing](#)
Find out more about the Perception Action Cognition Laboratory

Find out more about Athena Swan in the Faculty.

**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.