Faculty of Science and Health Studentship – for start date of January 2019

'Learning to move: exploring neural signatures of motor learning for brain-computer interfacing'

(Ref CSEE/PSYCH/JAN19/02)

The Schools of Computer Science and Electronic Engineering and Psychology in the Faculty of Science and Health at the University of Essex are pleased to announce a PhD studentship available in 'Learning to move: exploring neural signatures of motor learning for brain-computer interfacing'.

This studentship will start from 14 January 2019 and the successful applicant will receive a scholarship for three years (subject to satisfactory progression).

The studentship includes:

- a fee waiver equal to the Home/EU fee (for 2018/19, £ £4,410). International students will need to pay the balance of their fees.
- a stipend equivalent to the Research Councils UK National Minimum Doctoral Stipend (£14,777 in 2018-19)

Brain-computer interfaces (BCIs) have the potential to help movement rehabilitation. However, one problem with this technology stems from our incomplete understanding of how our brains change as we learn to move. This means current BCI protocols are based on static neural markers of movement production, which are, in reality, constantly changing.

This studentship will begin by investigating the neural basis of motor learning. We will then apply this knowledge to create more effective BCI protocols for movement rehabilitation.

Please address any additional questions and queries about the studentship to: Dr Ian Daly (CSEE) (i.daly@essex.ac.uk) and Dr Gethin Hughes (PSYCH) (ghughes@essex.ac.uk)

Entry Requirements

The successful candidate would be expected to speak fluent English and meet our English Language requirements, and will have a good honours BSc or BEng degree (1st, 2:1, or equivalent) in computer science, electronic engineering, mathematics, biological sciences, Psychology, Neuroscience, or a related subject.

An MSc with Merit or Distinction is desirable (but not essential for students with a first class degree). Strong analytical and mathematical skills are required, as well as good programming skills. Knowledge of signal processing, machine learning, and/or neuroimaging (EEG, fNIRS etc.) are desirable but not essential.

How to Apply

To be considered for this Scholarship applicants are required to apply for their PHD course in the
usual way via the University of Essex online admissions application process (including uploading all

supporting documents required) by the deadline of **Friday 20 July 2018.** Only complete PhD applications will be considered along with the scholarship departmental application form.

- Please note on your PG Admissions application form in the 'Proposed research topic or area of research' field that you wish to apply for this scholarship, quoting Ref CSEE/PSYCH/JAN19/02.
- In addition to your main online PhD application, you are also required to submit a separate departmental scholarship application form and submit separately to: csee-schooloffice@essex.ac.uk by the deadline of Friday 20 July 2018, quoting Ref (CSEE/PSYCH/JAN19/02).
- Successful applicants will be informed of the outcome of their application for their PHD course and the scholarship award by the end of September 2018.

For further information on our current areas of research please refer to our <u>research interests</u> and staff profiles: https://www.essex.ac.uk/departments/computer-science-and-electronic-engineering/people/academic and https://www1.essex.ac.uk/psychology/research/groups.aspx.

If you have a disability and would like this information in a different format please tel: (01206) 873521/874588.