<u>Computational Intelligence for Developmental Cognitive Neuroscience (Ref</u> <u>CSEE/APR18/11)</u>

The Faculty of Science and Health at the University of Essex is pleased to announce a PhD studentship available in "Computational Intelligence for Developmental Cognitive Neuroscience".

This studentship will start from 23 April 2018 and once awarded, you'll receive the scholarship for three years of your PhD (subject to satisfactory progression).

The studentship includes:

- a fee waiver equal to the Home/EU fee (for 2017/18, £4,120). International students will need to pay the balance of their fees.
- a stipend equivalent to the Research Councils UK National Minimum Doctoral Stipend (£14,553 in 2017-18)

The PhD fellowship will involve the development of computational models and algorithms for the analysis of neuroimaging data, enabling a framework that objectively deals with uncertainty, partial truth and ambivalence of brain function without jeopardizing expressiveness and interpretability. This novel computational framework will provide functions to extend the current methodology for the analysis of brain activation, functional and effective connectivity in neuroimaging methods that measure hemodynamic responses associated with neuron behaviour.

The applicant will also have the opportunity to perform experimental research in the area of developmental cognitive neuroscience that aims at studying the underlying and unknown cognitive mechanisms behind self-awareness, perception and consciousness in the early stages of human brain development. The University's centre for Brain Science accounts for one of the most comprehensive and equipped laboratories for Developmental Cognitive Neuroscience in the UK's, which has been featured in the <u>media</u>.

The successful applicant will part of The Centre for Computational Intelligence and supervised by Dr Andreu-Perez and Prof Hagras and also part of The Centre for Brain Science and supervised by Dr Rigato and Dr Filippetti.

Additional questions and queries about the studentship can be addressed to Dr Javier Andreu-Perez ja17785@essex.ac.uk.

Entry Requirements

The successful candidate would be expected to speak fluent English and meet our English Language requirements, if applicable, and will have a good honours BSc or BEng degree (1st class or high 2:1, or equivalent) in Computer Science, Statistics, Biostatistics, Bioengineering Mathematics, Physics or related subjects.

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 stochastic and random processes, machine learning, signal processing, and neuroscience 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 here: website, (including uploading all supporting documents required) by the deadline of Friday 23 February 2018.
- 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/APR18/11.
- In addition to your main online PHD application, you are also required to submit a separate application form, which can be accessed <u>here</u> and submit separately to:
- <u>csee-schooloffice@essex.ac.uk</u> by the deadline of <u>Friday 23 February 2018</u>, quoting Ref CSEE/APR18/11
- Applicants will be informed of the outcome of their application for their PHD course and the scholarship award by the end of March 2018.

If you have a disability and would like information in a different format telephone (01206) 873521/874588.