Hybrid Deep and Fuzzy Logic Based learning for functional genomics (Ref CSEE/APR18/10)

The Schools of Computer Science and Electronic Engineering and Biological Sciences at the University of Essex are pleased to announce a PhD studentship available in "Hybrid Deep and Fuzzy Logic Based learning for functional genomics".

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 aim of the project is to design and develop hybrid models of Deep Learning and white box models based on fuzzy logic systems to predict, explain and analyse the impact of genomic mutations on gene expression using new data generated by STARR-seq experiments. Using these methods, we expect to unveil causal mechanisms of complex diseases, such as cancer.

The successful applicant will be supervised by Dr Giovanni Stracquadanio, Dr Madapura and Professor Hani Hagras.

Additional questions and queries about the studentship to be addressed to:
Dr Giovanni Stracquadanio g.stracquadanio@essex.ac.uk

Entry Requirements

The successful candidate will have a good honours BSc, BEng, MSc degree in Computer science, electronic engineering, computer engineering, mathematics, or related subjects and will meet the English Language requirements of University. Strong analytical and mathematical skills are required, as well as good programming skills. Knowledge of machine learning, bioinformatics, and basic understanding of biology 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/APR18/10.

- In addition to your main online PHD application, you are also required to submit a separate application form, which can be accessed hereand submit separately to: csee-

schooloffice@essex.ac.uk by the deadline of **<u>Friday 23 February 2018,</u>** quoting Ref CSEE/APR18/10.

- Applicants will be informed of the outcome of their application for their PHD course and the scholarship award by the end of March 2018.

For further information on our current areas of research please refer to our research interests and staff profiles.

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