Algorithmic and Computational Aspects of Economics and Finance (Ref CSEE/APR18/05)

The School of Computer Science and Electronic Engineering at the University of Essex is pleased to announce a PhD studentship available in Algorithmic and Computational Aspects of Economics and Finance.

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 expansion of the Internet has brought about an exciting research area full of unexplored, well-motivated research directions. Its use as a primary computing platform has changed the way computation is now performed. In many contexts, reaching an outcome or a collective decision depends on information that is privately controlled by several agents, who have an interest in the actual outcome that will be realized. As a result, any individual agent might benefit, to some extent, by falsely reporting his private information. This, in turn, can greatly affect the performance of the overall system.

The goal of this project is to explore settings of strategic interaction in the intersection of computer science and economics: To what extent does the behaviour of the individual agents affect the overall outcome? Can the agents be motivated towards a more desirable behaviour? Algorithmic Game Theory is a perfect tool to model and analyse such competitive situations. It can be applied to examine the incentives of users in several different contexts like scheduling, block-chain applications, or finance, among others.

The successful applicant will be supervised by Dr Maria Kyropoulou and Dr Carmine Ventre.

Additional questions and queries about the studentship to be addressed to:
Dr Maria Kyropoulou maria.kyropoulou@essex.ac.uk and Dr Carmine Ventre
c.ventre@essex.ac.uk .

Entry requirements

At a minimum, the successful applicant will have a good honours BSc degree in computer science, mathematics, or related subjects. An MSc is desirable but not essential. Strong analytical and mathematical skills are required, as well as good programming skills. No other background knowledge is 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/APR18/05.

- In addition to your main online PHD application, you are also required to submit a separate application form, which can be accessed here and submit separately to: csee-schooloffice@essex.ac.uk by the deadline of **Friday 23 February 2018,** quoting Ref CSEE/APR18/05.

- 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.