Leverhulme-Magna-Carta Doctoral Training PhD Scholarship in Economics and Computer Science

Royal Holloway, University of London - Departments of Economics and Computer Science

This is a unique opportunity for a high-achieving graduate student to be fully funded to carry out research at the cutting edge of both economics and computer science. This PhD will be supervised jointly by members of the economics and computer science departments at RHUL and the recipient will acquire strong skill sets in both fields, a rare combination that should place him/her in great demand.

Project Title: Casualties of War: Boosting Accuracy of Conflict Analysis via Economics Modeling and Data Mining

The broad idea behind this research programme is to marry economic analysis with methods of big-data analysis, particularly large-scale data mining. Economics gives us a framework for analyzing the behaviours and strategic motivations of humans that participate in the generation and collection of data while computer science provides leverage to gather, organise, and analyze large quantities of data.

The project on casualties of war is a particularly research-intensive part of the full programme that enjoys co-operation from the Uppsala Conflict Data Program and Iraq Body Count, two of the most important operations in the world for building human-driven conflict event data. These links will give us a massive "ground truth" of accurate transformations of journalistic articles into coded events associated with a wide range of attributes, such as times, locations, perpetrators, weapons and casualties. Indeed, we already have a prototype system that performs these tasks well on the Iraq Body Count database and media archive.

We would like the student to extend the work beyond systems based on relatively reliable media reports into applications where people are or may be actively fabricating data. For example, recent research has suggested that many interviews supposedly conducted in international public opinion surveys are fabricated, something which economic theory might predict given the incentive structures within which interviewers operate in these surveys. Similarly, data gathered from social media on conflicts in Libya and Syria cannot automatically be considered reliable and there is a large potential payoff from systems that can sort real reports from fake ones.

Academic Requirements

We are looking for a student with strong interest in economics and openness to working with big data and learning computer science methods or a person with a strong interest in computer science and openness to learning and integrating economic theory into their work.

Funding Level

The successful applicant will have their full PhD fees paid at the appropriate rate for 3 years. Note that the Leverhulme Magna Carta awards are for an annual stipend of £16,296 and an HEU fee waiver. Students will become part of the Magna Carta Doctoral Centre and are expected to contribute to its activities.
**Contact Information and How to Apply**

For further information please contact Prof Mike Spagat [Mike.Spagat@rhul.ac.uk](mailto:Mike.Spagat@rhul.ac.uk)

Application procedure Informal enquires can be made, or further details about the research project’s scope discussed, by contacting Prof Mike Spagat [Mike.Spagat@rhul.ac.uk](mailto:Mike.Spagat@rhul.ac.uk), Dr Gregory Chockler [Gregory.chockler@rhul.ac.uk](mailto:Gregory.chockler@rhul.ac.uk) or Dr Zhiyuan Luo [Zhiyuan.Luo@rhul.ac.uk](mailto:Zhiyuan.Luo@rhul.ac.uk)

You should apply via Royal Holloway’s online application system, which can be accessed at: [www.rhul.ac.uk/studyhere/postgraduate/applying/howtoapply.aspx](http://www.rhul.ac.uk/studyhere/postgraduate/applying/howtoapply.aspx) In addition to completing the postgraduate application form, your application should include:

- A 1-2 page statement outlining your interest in the research project.
- A copy of your first degree and postgraduate qualifications.
- A current CV.

Closing Date for formal applications: Tuesday 5 April 2016.