Verification of Data-aware Systems

Dr Francesco Belardinelli

Studentship: Untaxed bursary of 16,777 per annum (2018/19 figure including London weighting plus home/EU fees)

The Department of Computing is a leading department of Computer Science among UK Universities, and has consistently been awarded the highest research rating. In the 2014 REF assessment, The Department was ranked third (1st in the Research Intensity table published by The Times Higher), and was rated as "Excellent" in the previous national assessment of teaching quality. Applications are invited for a PhD student in *Verification of Data-aware Systems* under the supervision of Dr Belardinelli.

In recent years Data-aware Systems have been put forward as a comprehensive framework to model complex business workflows by considering data and processes as equally relevant tenets of the system description

The SVeDaS project is designed to advance the state-of-the-art in the modelling, analysis and deployment of data-aware systems by using a novel, compositional, agent-based approach to their specification and verification.

To apply for this position, you will need to

- have a strong background in at least one of the following areas: Logics, Formal Methods, and Reinforcement Learning.

- be capable of programming in the most popular programming languages, including C, C++, Java.

- show commitment, team working and a critical mind.

Previous experience in formal verification by model checking and/or logics for multi-agent systems is preferred, but not essential.

Applicants are expected to have a First Class or Distinction Masters level degree, or equivalent, in a relevant scientific or technical discipline, such as computer science or mathematics. Applicants must be fluent in spoken and written English.

The position is fully funded, covering tuition fees, and a stipend/bursary. The position is available to home, and EU students.

How to apply

To apply for this position, please follow the application guidelines at: http://www.imperial.ac.uk/computing/prospective-students/courses/phd/phd-application-guidelines/

In the application form, please write *Verification of Data-aware Systems* in the "Proposed Research Topic" field, and *Dr Francesco Belardinelli* in the Proposed Research Supervisor field.

Early applications are encouraged. Informal inquiries about this position are also encouraged and can be directed to Dr Francesco Belardinelli. For further information see https://www.doc.ic.ac.uk/ fbelard/

This position will be based at the South Kensington campus in central London. Applicants are advised to visit http://www.imperial.ac.uk/computing/prospective-students/courses/phd/ for general information on becoming a PhD student in the Department of Computing.

We are committed to equality and valuing diversity. We are also an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Two Ticks Employer, and are working in partnership with GIRES to promote respect for trans people.