



Home/EU PhD Studentship in Information-Centric Networking

A PhD studentship in Information Centric Networking (ICN) is available, supported jointly through a UCL Impact Scholarship and through the European Union FP7 research project GreenICN – Architecture and Applications of Green Information-Centric Networking. Given that there is an award of 3 years home/EU fees and stipend costs, we are looking to recruit a very high calibre home or EU PhD student to work in this emerging area of crucial importance. Note that overseas applicants are NOT eligible.

While the fundamental Internet architecture and protocols were originally designed to enable host-to-host communication, the vast majority of the current Internet interactions address user-content access (web, content delivery networks, video/photo sharing, etc.) or user-user communication (voice over IP, text-based chatting, etc.) As such, many researchers are currently considering evolutionary and revolutionary new architectures that will better support information-centric operation. Evolutionary approaches operate in the application layer and start from previous content-delivery architectures while revolutionary approaches examine radical new network architectures that focus on scalable content access and distribution. The emerging information-centric networking area is receiving significant attention worldwide, with an underlying belief that it will lead to an ICN-oriented Future Internet. The Communications and Information Systems Group at UCL EEE has been at the forefront in ICN developments, being one of the first groups to propose alternative ICN-oriented architectures through the highly successful EU COMET project (<http://www.comet-project.org/>) and now through its participation in EU-Japan GreenICN (<http://www.greenicn.org/>).

Given the group's continuing work in this area and its involvement in the GreenICN project, we are able in conjunction with the UCL Impact Scholarship Scheme to fund a very high calibre home/EU PhD student in ICN. This area brings together content naming architectures, network-wide content caching, anycast communication, migration paths from the current host-based Internet and involves new protocol design, modelling, implementation and evaluation of novel approaches for the best support of efficient content access. The PhD student will work in the context of an existing world-class team in this area and will benefit from the relevant ongoing research in GreenICN which will provide additional stimuli.

We are looking for candidates with excellent computer and/or electronic engineering background while strong analytical/mathematical skills will also be a significant advantage. Experience of design/development and evaluation of networking or management systems and also simulation, Linux, Java, C/C++ or similar would be an advantage.

The studentship is available for three years and covers tuition fees at the UK/EU rate, plus a stipend at c. £15,800 pa (tax free), increasing with inflation. We are looking for the prospective student to start in October 2013 or January 2014. As such, a selection may be made before the closing date of 31 December 2013.

Applicants must fulfil the normal academic requirements for postgraduate study. In order to accelerate the process, a detailed CV including qualifications, experience and the names of two referees to be potentially contacted together with a one page research statement should be sent by email to Prof. George Pavlou (g.pavlou@ucl.ac.uk, see also <http://www.ee.ucl.ac.uk/~gpavlou/>) and Dr Yiannis Psaras (i.psaras@ucl.ac.uk) with subject "GreenICN PhD studentship". The selected applicant will be instructed to apply formally through PhD admissions.

Closing Date: first batch 30th September 2013, final deadline 31st December 2013