Research Studentships in Dynamic Service Adaptation for Smart Cities

Applications are invited for **four** funded Ph.D. studentships within Trinity College Dublin's Distributed Systems Group, to investigate the development of a dynamically adaptable service-oriented middleware to be applied to service-based smart cities.

The project will investigate the provision of a new service-oriented computing infrastructure that provides demand-based composition of software services interacting with a city-wide, dynamic network infrastructure. The project will investigate autonomic adaptation of services and infrastructure, ensuring resilient service provision within an integrated, city-wide system. The projects will demonstrate results on urban case studies including energy, water and transportation management, and urban flood detection.

Applicants should have a B.Sc. and/or M.Sc. in Computer Science, Software Engineering or a closely-related discipline and strong C++/C#/Java development skills. Experience in some combination of service-oriented computing, distributed systems, model-driven engineering and/or formal methods is desirable as are strong mathematical skills.

The project is supported by Science Foundation Ireland under the Principal Investigator programme between 2014-2018, and will be conducted in collaboration with Cork Institute of Technology, NUI Maynooth, IBM Smarter Cities Research Centre, Intel Intelligent Cities Lab, EMC2 Research Europe, and Arup. The studentship has a value of €23,500 per annum, for four years, which includes both fees and a tax-exempt student stipend.

Please apply by email to siobhan.clarke@scss.tcd.ie quoting "Smart Cities Studentship" in the subject line. Applications should include a curriculum vitae, in PDF format, giving full details of qualifications and experience, together with names of two referees. The closing date for applications is the 20th of June, 2014, though early applications will be processed.