

RESEARCH STUDENTS' SEMINAR SERIES

Wednesday 24 February 2016

10:00 – 11:00

**SEERC Conference Room
3rd Floor, Strategakis Bldg**

“An adaptive data architecture for Artificial Distributed Systems focused on monitoring patients with chronic diseases through wireless sensor networks”

By

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ABSTRACT

We live in a technological area where we are surrounded by interconnected sensors that are able to collect and distribute increasingly large amounts of data on a daily basis. Given the low cost of the sensor technology, the computational power and the presence of internet everywhere in the western world, it is not difficult to envision a future where software agents and robots would be involved in daily activities assisting humans in daily task. Wireless Sensor Network are seen as solution to lower the cost, and work in add hoc manner while it gives the possibility to interconnect real world with the virtual one through sensing. This will allow us to build highly sophisticated applications through real time monitoring. Considering the healthcare domain and developing countries in particular a solution would require the following consideration: (i) Limited resources (ii) Cost effective solution (iii) Wireless Ad hoc networking (iv) High ratio of patients per doctor (v) Higher number of people with chronic diseases. To this extend, we propose a data architecture that enables the collection of data from distributed environment tackling the research challenges in developing countries. This architecture would enable semantic interoperability among resources, *efficient* processing and augmentation of intelligence of receiving values from low cost wireless sensor networks.

The seminar series is open to all members of staff and students of CITY and to any externals that wish to attend.



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