RESEARCH STUDENT SEMINAR

Friday 30 March 2012
10:00 – 11:00

SEERC Conference Room
3rd Floor Strategakis Bldg

“Towards an integration and coordination framework for architecting multi-layered monitoring and adaptation of service-based applications”

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ABSTRACT

Service-Oriented Computing (SOC) has received an ever increasing attention from both the academia and the industry. SOC fosters the development of service-based applications (SBA) through the reuse of services. SBAs are hard to manage because they comprise a mixture of owned services with third-party services, which are out of the control of the SBA owner. In an SBA, the requirements which are satisfied during design-time might be violated at run-time, ultimately leading to faults or total failure of the SBA. This problem motivates the necessity of developing self-monitoring and self-adaptive SBAs. The existing approaches for monitoring and adaptation of SBAs are highly fragmented and they usually address a single layer of an SBA (business, service or infrastructure). This talk provides an introduction to the topic of monitoring and adaptation of SBAs, and the emerging challenges of implementing multi-layered monitoring and adaptation in SBAs. It presents initial thoughts towards a framework for integrating and coordinating diverse monitoring and adaptation mechanisms. The framework is based upon a flexible architecture for the loosely coupled integration of mechanisms; an expressive event schema for facilitating the conveyance of information between the mechanisms; and a coordination method for controlling the operation of the integrated mechanisms.

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