

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.