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# **RESEARCH STUDENTS' SEMINAR SERIES**

### Monday 13 January 2014 12:30 – 13:30

SEERC Conference Room 3<sup>rd</sup> Floor Strategakis Bldg

## "Cross-platform development and deployment of cloudbased applications"

By

### Mr Fotis Gonidis, PhD Candidate, Dept. of Computer Science, TUoS

#### **ABSTRACT**

The advent of cloud application platforms has paved the way for a new paradigm of software development where cloud services act as the building blocks for the creation of cloud-based applications. For developers to be able to exploit the full advantages of cloud platforms and leverage services provided by multiple cloud providers, they should be able to overcome the heterogeneity across platform offerings. Towards overcoming platform heterogeneity and enabling the cross platform development and deployment of cloud-based applications, the report proposes the development of a platform independent framework which acts as intermediary and decouples the application development from interacting directly with proprietary platform technologies. The framework is based on two main pillars: ontologies and model-driven engineering (MDE) techniques. Ontologies are exploited in order to enable homogenisation of the service descriptions of the various providers. MDE and particularly code generators allow for translating the service descriptions into concrete source code targeting each of the supported cloud providers. The seminar series is open to all members of *staff* and *students* of CITY and to any *externals* that wish to attend.



A Research Centre of the University of Sheffield