informatik-Kolloquium

Der Fachbereich Informatik der Johannes Kepler Universität Linz[1] lädt in Zusammen-arbeit mit der Österreichischen Gesellschaft für Informatik (ÖGI) zu folgendem Vortrag ein:

Prof. Dr. Alfonso Pierantonio
University of L'Aquila

Managing the Evolution of FOSS with Model-Driven Techniques

Mi, 21. September 2011, 13:30 Uhr
JKU, Science Park, MT 128

Abstract:
FOSS (Free and Open Source Software) systems present interesting challenges in system evolution. On one hand, most FOSS systems are based on fine-grained units of software deployment–called packages–which promote system evolution; on the other hand, FOSS systems are among the largest software systems known and require sophisticated static and dynamic conditions to be verified, in order to successfully deploy upgrades on users' machines. The slightest error in one of these conditions can turn a routine upgrade into a system administrator's nightmare. In this tutorial we introduce EVOSS – a model-based approach to support the upgrade of FOSS systems. The approach promotes the simulation of upgrades to predict failures before affecting the real system. Both fine-grained static aspects (e.g. configuration incoherences) and dynamic aspects (e.g. the execution of configuration scripts) are taken into account, improving over the state of the art of upgrade planners. The effectiveness of the approach is validated by instantiating the approach to widely-used FOSS distributions.

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[1] Der Fachbereich (http://informatik.jku.at) besteht aus folgenden Instituten:
Anwendungsorientierte Wissensverarbeitung (FAW), Bioinformatik, Computational Perception, Computergrafik, Computer-Architektur, Formale Modelle und Verifikation, Informationsverarbeitung und Mikroprozessortechnik (FIM), Integrierte Schaltungen, „integriert studieren", Pervasive Computing, Systemsoftware, Systems Engineering und Automation, Telekooperation

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Biography:

Alfonso Pierantonio is Associate Professor in computer science at the University of L'Aquila (Italy), he is currently director of the Master in Web Technology degree program. His current research interests include Model-Driven Engineering and in particular the theory and practice of model versioning/evolution with a specific emphasis on coupled evolution. In particular, he investigated the problem of co-evolution between metamodels and other artifacts in order to define the basis for their (semi) automatic adaptation. He has been and is currently part of program and organization committees of conferences and has been among the initiators and in the steering committee of the International Conference on Model Transformation (ICMT). He co-edited several special issues on Model Transformations appeared in different scientific journals and is associate editor of the Springer Journal of Software and Systems Modeling. More information on http://www.di.univaq.it/alfonso

Univ. Prof. Dr. Gabriele Kotsis
Institut für Telekooperation

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