

Session 5 Discussion

Recorded by Amel Bennaceur, The Open University, UK

Dynamic Software Composition for Run-time System Evolution - Robert Hirschfeld

Robert started by introducing the basic concepts of context-oriented programming and explained its relation with aspect programming and reflection. He then presented the concept of layers and their use in behavioural and structural scoping. In particular he explained how to organise changes into layers, which are then used to enact changes at runtime to the object/classes concerned. Finally, Robert gave directions on how to use layers in the context of self-adaptive systems using MAPE-K loop.

High Variability Models for Better Adaptive Systems - Kostas Angelopoulos

Kostas discussed the relation between the variability of requirements, specified using awareness requirements, and the variability of architecture and behaviour. He refers to the intertwining of these three models as three-peaks. He then presented an approach that uses control theory to trade-off a set of potentially conflicting requirements.