

Session 9 Discussion

Recorded by Amel Bennaceur, The Open University, UK

A View-based Approach to Software Adaptation - Zhenjiang Hu

Zhenjiang presented an approach to adaptation based on views as a means to bridge the gap between goal- and rule- based adaptation. Views define the invariants that must be preserved through the application of the adaptation rules. The satisfaction of goals drive the definition of the views. Zhenjiang gave a formal definition of views and illustrated the proposed approach using an eCommerce example.

Bidirectional Programming for Self-adaptive System - Lionel Montrieux

Lionel started by introducing some background on bidirectional transformations. He then gave some ideas on potential uses of bidirectional transformations in the context of self-adaptive systems. In particular he explained how by specifying the concretisation process (put function), one can obtain some guarantees about the abstraction process (get function).

Evolving Dynamic Software Product Lines - Clément Quinton

Clément explained how updating variability models (feature models) at runtime may lead to inconsistencies in the associated software artefacts (Dynamic Software Product Lines). He then proposed a framework where adaptation rules are updated and managed so as maintain the variability models and the associated software artefacts consistent.