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General Chair: Volker Gruhn
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Companion Volume

**Workshop on Traceability, Dependencies and Software Architecture
(TDSA 2011)**
Organizers: Matthias Riebisch, Hannes Schwarz, Yijun Yu, Stephan Bode

**1st International Workshop on Software Architecture Variability
(SAVA 2011)**
Organizers: Abdelhak-Djamel Seriai, Dhouha Ayed

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Workshop on Traceability, Dependencies and Software Architecture (TDSA 2011)

Software architecture has to consider the goals of an efficient development process, a minimization of risks, and a communication of the core concepts of a software system. As relations between requirements, design concepts, and the implementation can be captured by traceability information, design traceability enables the explicit representation of such architectural knowledge. Having established an adequate scheme for design traceability, tool-based analyses can be performed on the basis of traceability links and other dependencies that interconnect architecture descriptions with requirements, source code fragments, and other important software artifacts. These analyses can aid in various applications, such as reengineering, architecture evaluation, and change impact analysis. However, the challenges and problems posed by traceability with all its related activities are not entirely solved yet.

The TDSA workshop deals with the latest approaches from research and practice. It aims to bring together researchers and practitioners in the area of traceability in the context of software architecture. State-of-the-art approaches as well as practical experiences are discussed to identify current research questions and to encourage future research activities in that area. The workshop consists of two parts. The presentation part, for which submitted papers have been selected after a peer reviewing process, is extended by two invited talks to sharpen the focus of the workshop. The plenary discussion then aims at an investigation of the challenges of traceability in the context of software architecture, including the sketching of a road map for further research.

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- Matthias Riebisch, Ilmenau University of Technology, Germany
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1st International Workshop on Software Architecture Variability (SAVA 2011)

Variability is the ability of a system to be efficiently extended, changed, customized or configured for use in a particular context. Variability management throughout the different phases of the development lifecycle of complex systems becomes a primary concern that needs to be addressed. Addressing issues related to modeling, managing and reasoning about software variability at architectural level gained a special interest. In this context, software architects need to address variability as an architectural key concept and first-class quality attribute. They call for methods, formalisms, techniques and tools to model, represent and evaluate variability. All these needs require a better understanding of variability management and more theoretical foundations of architectural variability.

The purpose of this workshop is to promote the theme of variability management from architectural perspectives. It aims at contributing to the development of a basic understanding of the notion of variability in the software architecture. In particular, it provides a venue for researchers and practitioners interested in software variability management, in order to identify possible points of synergy, common problems and solutions, as well as visions for the future of the area.

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1st International Workshop on Software Architecture Variability (SAVA 2011)

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