MOTIVATION AND OBJECTIVES

This workshop focuses on current and emerging methods, languages, notations, technologies and tools to extract, represent, share, use and re-use architectural knowledge. Architectural Knowledge (AK) is the integrated representation of the software architecture of a software-intensive system (or a family of systems), the architectural design decisions, and the external context/environment. It is increasingly recognized as the means for architecture governance; it facilitates and supports collaboration and the transfer of expertise.

In this fifth SHARK edition we will ask the community to discuss and contribute on how to reorganize and codify the Body of Knowledge of the WICSA community (WICSA BOK). This is partially available through www.softwarearchitectureportal.org and www.wicsa.net, but it needs to be reorganized and unified. We see two broad objectives: (1) to codify the BOK in the way the potential users (i.e. the members of the architecture community) would like to see it; and (2) exploit Web 2.0 and social networking techniques to support AK sharing, and better reachability/usability (again) according to the actual needs of the community itself. SHARK contributions will have the opportunity to propose their ideas and R&D results to shape the next generation www.softwarearchitectureportal.org BOK.

MAIN TOPICS

Topics of the workshop include but are not limited to:
* Types of architectural knowledge in industrial settings
* Notations and languages to model or visualize architectural knowledge
* Ontologies, domain models and meta-models for architectural knowledge
* Communicating, sharing, using architectural knowledge: approaches, case studies
* Tools to extract, visualize, share or use architectural knowledge
* Evolution of architectural knowledge
* Sharing architectural knowledge in the context of service-oriented architectures (SOA) or Model-Driven Engineering (MDE)
* Architectural knowledge in Global Software Engineering
* Communicating architectural knowledge in open and closed communities
* Architectural knowledge for requirements engineering
* Traceability between requirements, architectural design decisions and architectural solutions (e.g. patterns, tactics, reference architectures)
* Architectural knowledge in the process of architecting
* Emerging technologies supporting knowledge sharing