

Seminar Series Computer Science



Architecture-Implementation Conformance: Enabling Architecture Centrality

Dr. Yongjie Zheng, UMKC Aug 27th Tuesday, 12:30 to 1:30pm 209 Comp. Sci. Bldg.

Abstract - With recent development in the technologies of software architecture, architecture-centric software development shows some promising results in terms of improving software productivity and quality. It represents a new development paradigm where software architecture is used not only to describe and analyze, but also to synthesize, integrate, and evolve software systems. To make architecture centrality widely adopted in practice, however, there must be an approach to automatically maintaining conformance between software architecture and code during development and evolution. In this presentation, I will introduce an architecture-implementation mapping approach called 1.x-way mapping that we have developed. In addition, I will present how the research on architecture-implementation mapping potentially enables architecture centrality in software development. Demos will also be given in my presentation to further illustrate the idea.

Brief Bio - Dr. Yongjie Zheng is currently an assistant professor in the Department of Computer Science and Electrical Engineering at University of Missouri - Kansas City. He received his Ph.D. degree from University of California, Irvine in 2012. Dr. Zheng's research area is software engineering in general. He is particularly interested in software architecture-based research, including architecture-implementation mapping, product-line architectures, and architecture-based adaptation.