

## **WICSA 07 Tutorial**

An Introduction to Effectively Evaluating Software Architectures

Len Bass, Robert L. Nord

January 6, 2007, (Half Day – AM)

Software architecture has become a widely-accepted conceptual basis for the development of non-trivial software in all application areas and by organizations of all sizes. Effectively evaluating architecture is as important as crafting it in order to have assurance that it successfully addresses the target system qualities, which in turn, help fulfill the business goals of the system. We present the Architecture Tradeoff Analysis Method (ATAM), a practical and comprehensive approach for evaluating software architectures that is based on the principles of quality attributes and architectural tactics. We have gained experience with the approach by analyzing the architecture of several systems, and the ATAM is now a standard practice in many large companies.