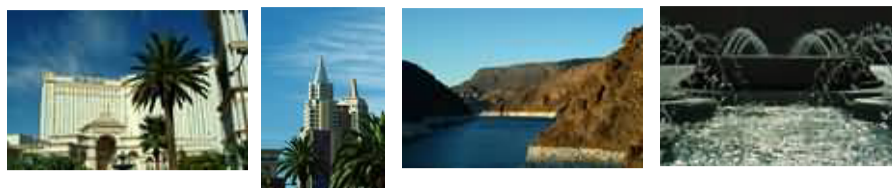


# 4<sup>th</sup> INTERNATIONAL WORKSHOP ON SYSTEM/SOFTWARE ARCHITECTURES ( IWSSA'05 )

co-located with  
THE INTERNATIONAL CONFERENCE ON  
SOFTWARE ENGINEERING RESEARCH AND PRACTICE ( SERP )

June 27-30, 2005, Monte Carlo Resort, Las Vegas, Nevada, USA



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## THEME

Just about everything has an architecture - be it a software system, an organization, or even a human body - consisting of parts and interactions among the parts. Of increasingly crucial concerns in Software Engineering are, on the one hand, the system architecture which describes the parts, and interactions between the parts, of the enterprise in which the projected software system is to function, as well as the architecture of the projected software system itself, on the other.

This year's theme is quality system and software architectures. Inevitably most of the properties of the final system/software are determined by the architecture, hence the quality properties of the architecture becoming a central concern for the quality of the final system/software. However, designing and developing high quality architectures currently is anything but systematic. The variety of domains and the unique challenges each poses make it almost impossible to specify a simple set of rules that architects could follow in order to ensure high quality, despite the pressing need for high quality architectures in industry.

You are invited to participate in the 4<sup>th</sup> International Workshop on System/Software Architectures (IWSSA'05), which will provide an international forum for researchers and practitioners to exchange ideas and discuss the problems, as well as solutions, in the field of system architecture and software architecture. A main theme of this workshop will be about techniques and methodologies for developing high quality system/software architectures with such capabilities as adaptive, ubiquitous, autonomous, self-healing, dependable, secure, etc.

## WORKSHOP

The 4<sup>th</sup> International Workshop on System/Software Architectures (IWSSA'05) will be held as part of the International Conference on Software Engineering Research and Practice (SERP '05), June 27-30, 2005, in Las Vegas, Nevada, USA. SERP '05 is part of the 2005 International MultiConference in Computer Science (<http://www.world-academy-of-science.org>). IWSSA'05 will be the 4<sup>th</sup> workshop in the series - the 3<sup>rd</sup> International Workshop on System/Software Architectures was held in 2004 as part of SERP'04, the 2<sup>nd</sup> Workshop on Adaptable Software Architectures was held in 2003 as part of SERP'03, and the 1<sup>st</sup> Workshop on Adaptable Software Architectures was held in 2002 as part of SERP'02. All received excellent responses and the top papers were published not only in the conference proceedings but also in special journal issues. This year, selected papers from those presented at IWSSA'05 will be published in a special issue on "Quality System and Software Architectures" of the International Journal of Science of Computer Programming, an Elsevier publication.

The topics for the papers include, but not limited to:

- roles of system architectures in Requirements Engineering,
- roles of Requirements Engineering in system architecting,
- models of, and model-driven approaches for, system/software architectures,
- applications, and case studies, of system/software architectures,
- engineering quality in architectures to include characteristics such as adaptability, ubiquity, autonomicity, self-healing ability, dependability, security, performance, usability, etc.,
- mapping, and traceability, between the system architecture and the corresponding software architecture,
- formal validation and verification techniques,
- metrics for architectures,
- object-oriented/aspect-oriented/goal-oriented/agent-oriented/scenario-based approaches to system/software architecture development,
- COTSGOTS/Component/Middleware-based development methodologies for system/software architecture

## PAPERS

Two types of papers are invited:

- short paper: 1-4 pages, position paper or work-in-progress
- full paper: 5-7 pages, research results or experience

All papers should be in the IEEE format. All papers will be peer-reviewed by the PC members and accepted papers will be published in the workshop proceedings. Please send the papers with the subject "IWSSA05" to one of the workshop co-chairs:

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## IMPORTANT DEADLINES

Paper Submissions Due	March 19 <sup>th</sup> , 2005
Acceptance Notification to Authors	April 4 <sup>th</sup> , 2005
Camera-ready Papers Due	April 15 <sup>th</sup> , 2005