The 4th ACS/IEEE International Conference on Computer Systems and Applications March 8-11, 2006, Dubai/Sharjah, UAE

The 5th International Workshop on Software Stability: Methodologies, Applications and Tools

http://www.engr.sjsu.edu/fayad/workshops/AICCSA06/

http://www.vrlsoft.com/workshops/AICCSA06/

In association with

The 4th ACS/IEEE International Conference on Computer Science Systems and Applications March 9-11, 2006, Sharjah, United Arab Emirates <u>http://www.cs.utk.edu/aiccsa06/</u>

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Important Dates:

- Paper Submission December. 05, 2005
- Acceptance notification December 08, 2005
- Camera ready paper due December 11, 2005
- Workshop date: TBA

Software defects and "deterioration" are caused by changes in software. Many of these changes cannot be avoided. These changes can be minimized, however. Currently, when a change must be made to a software program, most of the time the entire program is reengineered. It does not matter if the change required is due to new technology or a change in clientele. The core purpose of the software product has not changed. Why, then, must the entire project be reengineered to incorporate a change? Developing stable software can therefore alleviate the tremendous projected cost associated with future changes in the system. This workshop will bring together practitioners and researchers who have been involved in the development of stable and adaptable software, or are interested in learning more about the state-of-the-art in software stability its tools and methodologies. Papers are invited on both theoretical and practical aspects relevant to software stability. Topics include (but are not restricted to):

- Theories of software stability
- Stable software architectures
- Methodologies and guidelines for developing stable software systems
- Tools for automating software stability development and assessments
- Model-based software reuse
- Requirements analysis for stable software
- Stability versus Adaptability, how and when they can contradict each other
- Conceptual models for software stability
- Impact of stability on software reuse
- Case studies of the building stable software
- Testing and analysis of stability
- Stable software patterns
- Extracting and reusing patterns from developed architectures
- Measuring stability in developed systems
- Impact of software stability on new technologies (e.g. aspect-oriented architecture and programming, multi-agent technology, constraints-oriented software development, component-based software development, search-based software etc)
- Patterns compositions
- Separation of Concerns for engineering stable software.

Participation:

Participation in the workshop can be done in one of two ways:

- Submitting a position paper of 3-6 pages that address any of the relevant topics related to the workshop. Submissions must be either MS-Word or RTF formats (please, DO NOT compress files). Please send your paper to <u>m.fayad@sjsu.edu</u>, <u>izualkernan@aus.edu</u>, and <u>hhamza@cse.unl.edu</u>
- Sending an email to the workshop chairs describing their relevant experience.