Call for Participation

The International Symposium on Software Reliability Engineering (ISSRE) focuses on the practice and theory of software systems reliability engineering and analytics. The scope ranges from techniques and practices to verify, validate and test software, to those needed to estimate and predict its reliability, availability and dependability, to those that make it more tolerant to faults and (unexpected) changes in operating conditions, to the impact different development methods and processes have on the field reliability of a software-based product. While, as always, the conference will provide an in-depth representation of both software reliability engineering (SRE) theory and experimentation, this year strong focus will be on the **SRE practices and challenges faced by the software industry.** For example, how to train work-force in the best practices that result in reliable software-based system, how to apply SRE methods in open-source environments, how to make software secure, how to deal with networked or embedded software-based systems, how to tool-up for and automate SRE, and is there such a thing as “good enough” reliability.

**Topics, as they relate to reliability, availability and dependability of software and software-based systems, include but are not limited to the following**
- Reliability, availability and dependability modeling and practices
- Software development methods, processes and standards (including reliable, secure and trustworthy software architectures)
- Software safety, security, trust and information assurance analysis
- Verification, validation and testing (including formal methods)
- Empirical studies; Metrics and measurements, estimation, and prediction
- Tools and automation (including SRE analytics and visualization)
- Fault-tolerant, robust and dependable software-based systems (including SRE of cyber infrastructure components such as storage, networking, switching, high-performance systems and applications, virtualization frameworks and solutions, and mobile and wireless devices and infrastructural components)
- Networked software-based systems (including end-to-end workflows & services, ad hoc networks, sensors)
- Reliability of critical systems with software components (e.g., Internet and cyber infrastructure, bio-medical, flight and other transportation, information security)
- Open source systems
- Role of reliability in government and government-sponsored software-based systems
- SRE implementation and experiences, workforce development and training

**ISSRE will be collocated with a number of workshops, including the workshop on Advances in Model-Based Software Testing (A-MOST’06, 6-7 Nov 2006).**

ISSRE will be held in Raleigh, North Carolina, USA. Raleigh is the state capital and part of the world-renowned Research Triangle. Research Triangle is home to leading technology firms, government organizations and world-class universities and medical centers. It is an area often recognized as one of the best places to live in the U.S., and one of the places with the highest concentration of information technology oriented work-force.