As Web-based services grow exponentially in importance, so grows the need for effective, efficient testing. To the software tester, the Web is the world’s most complex metaplatform—a Web application running on a broader collection of hardware/software platforms than any other type of application in history. These platforms change continuously, including essential components, such as the application’s user interface layer, and its means to connect to critical databases, the services that enable or complete transactions. To the tester, the Web application is in a constant state of evolution, even when the application code per se isn’t changing at all.

Web site usage also evolves, even when the site’s code is unchanging. People come to a site from anywhere in the world, with fundamentally different expectations about culture, communication style, rules for negotiation and agreement, user support, performance, reliability, security, on so on. Those expectations are partially set by the styles of the other sites an individual user has interacted with. The perceived usability and acceptability of a site evolves continuously, as the site’s user populations’ expectations evolve.

The goal of this one-day workshop is to bring together members of the Web design, software engineering, information assurance, and information technology communities to discuss test techniques for Web applications and services. WSE 2004 will provide an opportunity for the exchange of information related to exciting new research and empirical results in areas including (but not limited to):

- Testing approaches that provide support for refactoring of the Web site, including test-driven development.
- Improving testability by analyzing and reverse engineering Web site content, structure, and site logs.
- Tools that support testing and monitoring the Web site for problems in performance, reliability, or security.
- Modeling and testing the scalability of the Web site.
- Testing the usability of the Web site for diverse populations.
- Good practices for configuration and compatibility testing of the Web site.
- The legal environment for Web testing—for example, the legality of running benchmark tests, or of reverse engineering to achieve interoperability or to troubleshoot bugs.

WSE 2004 is co-located with the IEEE International Conference on Software Maintenance (ICSM 2004). ICSM is the IEEE Computer Society’s flagship event focused on the modernization of existing systems.

WSE 2004 will include invited talks, paper presentations, and discussion sessions. Participants should submit a research paper or experience report, not to exceed 4000 words (8 pages using 10-point type), including figures and references. Submissions may be in Adobe Acrobat PDF, Microsoft Word, or Postscript formats. **Submissions must be sent as an email attachment to kaner@cs.fit.edu by Friday, May 7, 2004.** Authors of accepted papers will be notified by June 11, 2004. Final versions of accepted papers are due on July 9, 2004.

**General Chair**
Paolo Tonella, ITC-irst, Italy

**Program Chair**
Cem Kaner, Florida Institute of Technology, USA

**For More Information**