Abstract
The first Frontiers of Software Practice (FoSP) sessions at ICSE highlights new developments in real-world software engineering. With the unprecedented amount of change in the computing industry, keeping abreast of new developments in both research and practice is extremely challenging. FoSP will benefit software professionals of all stripes by introducing them to eight topics representing cutting-edge software engineering practice.

1. Introduction

The rate of change in the software industry is truly amazing. There is no modern precedent for an industry that introduces new products into the market at such a rapid pace. Consider that processing speed doubles every eighteen months, storage capacity doubles every ten months, and bandwidth doubles every six months. Where else do such dramatic changes take place year after year?

Keeping abreast of new developments is a constant challenge. Universities, government centers, and industrial laboratories continue to investigate fundamental issues related to software engineering research. At the same time, many advances are being made in the commercial arena related to software engineering practice. Tracking these activities is necessary for all software professionals, so that they can make more informed decisions.

For this inaugural session of the Frontiers of Software Practice (FoSP), we are indeed very fortunate to have eight different speakers presenting material on the cutting edge of software engineering in the real world. The presentations range from collaborative software engineering (system design and development) to modern middleware infrastructures (system deployment) to voice-based access to the Web (system delivery). The FoSP sessions (summarized below) are another example of how ICSE bridges the gap between software engineering research and practice.

2. Enabling Technologies for the Future of Voice-Based Web Access

Speaker: Steve Woods
Affiliation: America Online Interactive Properties

Abstract: Voice offers the ultimate in wireless access, providing information on existing data pathways and using existing technology but in a new way. Several companies have recently begun offering platforms, tools, and processes for developing and delivering voice-based information applications as part of a SpeechWeb. These companies have been riding on the heels of a revolution in speaker-independent speech recognition that is fueled largely by consistent gains in processor power and memory availability as well as fundamental algorithmic improvements. This talk describes the enabling technologies behind the Quack/AOL Voice Services Platform (VSP), which is comprised of novel approaches to delivering information, to creating applications, and to publishing processes. The VSP not only duplicates the well-known models offered by web servers and feature-rich browsers in the web space, but extends this model to enable new kinds of application publishing paradigms that rely upon semantic models of information navigation rather than visual presentation models.

Chair: Scott Tilley, Univ. of California, Riverside, USA

3. Jini™ Network Technology: Devices, Desires, and Designs

Speaker: Aleta Ricciardi
Affiliation: Valaran Corp.

Abstract: This talk will examine the way in which Jini™ Network Technology facilitates both software development for distributed applications, and software