Workshop Abstracts

Workshop W1: CASE Tools for Large Reengineering Projects
Co-Champions: Kostas Kontogiannis, McGill University, Canada; Ted Kitzmiller, Boeing, USA; Toru Takeshita, Chubu University, Japan

Reengineering large legacy systems involves several activities, including redocumentation, design recovery, design transformation, and code generation. Although well-designed tools are vital to the reengineering effort, many of these activities are not well supported by the suite of existing tools, and some large companies engaged in reengineering have adopted one or more tools.

Workshop W2: Business Process Reengineering Tools
Champion: Elliot Chikofsky, DMR Group, USA

The surge of interest in Business Process Reengineering (BPR) has spawned new tools and environments to aid the modeling and analysis of business operations. These tools embody CASE concepts, but they provide the analyst with very different capabilities from the diagram-to-code model typically associated with CASE for software development. Through demonstrations, focused presentations, and discussion, this workshop will explore the state of tools for BPR and the direction of CASE support for analytical reengineering.

Workshop W3: CASE Tool Integration
Champion: Alan Brown, SEI, USA

This workshop will provide an interactive forum to discuss practical aspects of integrating CASE tools. The workshop will bring together a number of CASE integration experts to discuss approaches and techniques that are effectively being used to allow tools to interact. Attendees will learn how some of the major Integrated CASE environments have been constructed, which integration mechanisms are currently in use, and practical guidelines on how to integrate CASE tools using current technology effectively.

Issues to be considered during the workshop include:

- what integration mechanisms are currently in use?
- how much effort is required to integrate CASE tools?
- how can the benefits of integrating CASE tools be assessed?
- how effective are current interface and interchange standards to CASE tool integrators?
- what lessons and guidelines can be drawn up to help CASE tool integrators?
- how can integrated CASE environments be evolved efficiently as the tools and processes change over time?

Workshop W4: Object-Oriented Frameworks for Application Development and Integration
Co-Champions: Sridhar Raghavan, DEC; Rudolf Keller, Universite de Montreal, Canada

Object Technology, if applied properly, can deliver significant benefits for building and integrating large-scale distributed applications. It advocates conceiving and implementing systems in terms of a large number of interacting objects. The key underlying challenges are inventing the right objects and organizing them within some overall, unifying framework so that these objects can coexist, interoperate, cooperate and collaborate efficiently and productively. Most importantly they must be capable of growing and rapidly adapting to changes in requirements.

The industry offers a variety of frameworks to address these needs. For example low level infrastructure frameworks such as CORBA, OLE, DCE; application development environments/frameworks such as offered by Forte, ParcPlace, NextStep, Digitaltalk, Class Libraries etc.; high level industry frameworks such as STEP, SEMATECH etc., proprietary domain-level framework-based approaches offered by vendors such as Digital (FBE) and Andersen Consulting (Eagle), and framework development approaches such as domain analysis, and design patterns.

The purpose of this workshop is to assess the strengths and limitations of some of these frameworks, and framework development approaches for developing and integrating enterprise-wide distributed applications. Emphasis will be on higher level frameworks and practical experiences.
Workshop W5a: Architecture-Based CASE Systems  
Co-Champions: Ric Holt, Spiros Mancoridis, University of Toronto, Canada

Research trends in software architecture suggest that formal design structures can be as integral a component of software systems as source-code. In this workshop we will discuss how tools for software architecture specification, visualization, manipulation, and reuse can be integrated with other tools for software development to produce Architecture-Based CASE Systems.

Workshop W5b: Component-based Technologies  
Jim Ning, Voytek Kozaczynski, Andersen Consulting, USA

Many researchers and industry visionaries have come to realize that the future of the software industry will be based on a component market in which new applications will be assembled from commercial-off-the-shelf components. This paradigm of software development calls for new processes, tools, techniques, and platforms that may be fundamentally different from what the CASE industry has produced so far. This half-day workshop will provide an opportunity to explore key enabling technologies for a component-based software industry in the future. The discussion will center around, but not be limited to, the following topics:

- component interface specification techniques
- component assembly specification techniques
- component packaging techniques
- component integration architectures and platforms
- component classification, retrieval, and distribution techniques.

Workshop W6a: Requirements Engineering Tools  
Champion: John Mylopoulos, University of Toronto, Canada

The workshop is intended to bring together practitioners and researchers in order to review the state-of-the-art in Requirements Engineering tools, discuss research directions and present on-going research. The workshop programme will include a keynote presentation by a prominent researcher in the Requirements Engineering area, short talks on on-going work by workshop participants and a panel on controversial issues related to Requirements Engineering.

Workshop W6b: Development Environments for Distributed Applications  
Co-Champions: Mike Bauer, University of Western Ontario, Canada; Pat Finnigan, IBM Canada Ltd.

This workshop will explore issues, critical tools and characteristics of CASE environments central to the development and deployment of applications spanning multiple processors in a network. User experiences in this complex environment will be identified, as will promising technologies to meet this urgent need. This roadmap to successful building of distributed applications will be used to prioritize both research activities and commercial tool product plans.

Workshop W7: CASE Adoption  
John Jenkins, City University London, UK; Gene Hoffnagle, IBM, USA

This workshop on CASE adoption will examine the process of CASE adoption in an attempt to identify critical factors for success or failure. Authors of papers submitted to CASE 95 describing empirical studies of CASE adoption will be invited to describe their findings.

Workshop W8: CASE and Project Management  
Co-Champions: Karl Reed, David Cleary, La Trobe University, Australia

This workshop will examine the role of CASE in project management and project measurement. Topics to be considered include: (a) How should management and measurement be integrated? (b) What are the limits of automated project tracking? (c) What kind of computer aided support is needed for project planning? (d) Are existing views of process a help or a hindrance? (e) What is currently available? (f) Do project management requirements influence CASE tool decisions?