Foreword
Preface
Program Overview
Conference Organizers
Program Committee
Reviewers
Opening Session
Plenary Session 1
Plenary Session 2
Keynote Address 1
The Wireless On-Ramp: Always On, Anywhere Computing
Requirements Engineering
Business Rules Specification, Enforcement and Distribution for Heterogeneous Environments
Visualization Issues for Software Requirements Negotiation
Component-Based Development
Component-Based Design of Large-Scale Distributed Systems
A Configuration Management System Supporting Component-Based Software Development
Converting Web Applications to Data Components: Design Methodology
Protocols and Harmonization
A Long and Winding Road (Progress on the Road to a Software Engineering Profession)
Harmonized Conformance Testing for Product Data Managers
Exploiting Automatic Analysis of E-Commerce Protocols
Large Scale Software Development: What Have We Learned?
Reverse Engineering and Re-Engineering
ELKAR: A Component Based Re-engineering Methodology to Provide Cooperation
JBOORET: An Automated Tool to Recover OO Design and Source Models
MOOSE--A Task-Driven Program Comprehension Environment
Quality Management
Investigating Reinspection Decision Accuracy Regarding Product-Quality and Cost-Benefit Estimates
A Memory-Based Reasoning Approach for Assessing Software Quality
Quality Planning for Software Development
Software Architecture: Impact on Software Development
From Software Architectue to Implementation with UML
The Costs of Open Source/Experiences
Workflow Systems
Designing Role Hierarchies for Access Control in Workflow Systems
Retrofitting Workflows for B2B Assembly
End-to-End Integration Testing

End-to-End Integration Testing in CBSD

End-to-End Integration Testing

Commercial Off-The-Shelf Components

DSIAS: A Software Architectural Style for Distributed Software Integration Systems

Empirical Software Simulation for COTS Glue Code Development and Integration

Metrics-Guided Quality Management for Component-Based Software Systems

Process Case Studies

E-Adome: Enacting Composite E-Services in an Advanced Workflow Environment

An Empirical Study of Software Productivity

Test Operation-Driven Approach on Building Regression Testing Environment

Automation of Design and Development of Embedded Software on the Basis of a Strictly Defined Software Architecture

An Editing System for Working Processes

The Position of E-Learning Application Software

The Position of E-Learning Systems in 2001

Debunking some Common Misconceptions on E-Learning

Building the Infrastructure of E-University

E-Learning in 2001

3G and Wireless Infrastructure: Impacts on Developers and Users

Keynote Address 3

Information Technology Research Agenda: New Developments and Ambitions

Software Testing 2

Formalization of Software Testing Criteria Using the Z Notation

Integrating White- and Black-Box Techniques for Class-Level Regression Testing

An Observational Theory of Integration Testing for Component-Based Software Development

Web-Based Systems

A Runtime Composite Service Creation and Deployment Infrastructure and Its Applications in Internet Security, E-Commerce, and Software Provisioning

A Rough Set Based Self-Adaptive Web Search Engine

Supporting Web Development in the OPEN Process: Additional Tasks

What are the Missing Elements in SE Research and What Next?

Object-Oriented Development

The Exu Approach to Safe, Transparent and Lightweight Interoperability

Task and Team Management in the Distributed Software Project Management Tool
Utilizing Object-Oriented Databases for Concurrency Control in Virtual Environments

Embedded Systems

Algebraic Transformations in Regular Array Design

A Case Study on Formal Design of Hybrid Control Systems

Reducing Matching Time for OPS5 Production Systems

Agent Technology and Frameworks

Accomplishing Adaptability in Simulation Frameworks: The Bubble Approach

Dealing with Denial-of-Service Attacks in Agent-Enabled Active and Programmable Infrastructures

Implementing an Agent System Using N-Tier Pattern-Based Framework

Industry Application Case Studies

An Application of Data Warehouse Technology to the Measurement System for UML-Based Artifacts

Availability Requirement for Fault Management Server

InfoSleuth: Agent-Based System for Data Integration and Analysis

Java in Industrial Automation--A Virtual PLC

Plenary Panel Session: Trends of Software Technology to Meet Changing Environments

Software Testing 3

PePPer: A New Model to Bridge the Gap between User and Designer Perceptions

Requirement-Based Automated Black-Box Test Generation

Scenario-Based Functional Regression Testing

Data Mining

An Efficient Clustering Algorithm for Market Basket Data Based on Small Large Ratios

An Efficient Hash-Based Method for Discovering the Maximal Frequent Set

Mining Market Value Functions for Targeted Marketing

Metrics and Measurement

An Assessment Approach to Analyzing Benefits and Risks of Product Lines

CLPKIDS: A Program Analysis System for Concurrent Logic Programs

Measuring the Intensity of Object Coupling in C++ Programs

Extensible Markup Language (XML)

Building and Managing XML/XSL-Powered Web Sites: An Experience Report

Using SOAP to Clean up Configuration Management

An XML-Message Based Architecture Description Language and Architectural Mismatch Checking

Design Patterns and Frameworks

An Unsupervised Segmentation Framework for Texture Image Queries

Coupling of Design Patterns: Common Practices and Their Benefits

Exception Handling in Component-Based System Development

E-Commerce