Welcome Message
Organizing Committee
Program Committee
Keynote Speech: High Assurance Life and Death p. 2
MK48 ADCAP Torpedo High-Assurance Testing p. 8
A Real-Time Specification Environment Based on Z and Graphical Object-Oriented Modeling Techniques p. 16
Top-Down Development of Real-Time Software Specification p. 271
Specifying Timing Constraints in Real-Time Object-Oriented Systems p. 32
A Technique for Validating Booch Object-Oriented Designs from Extensions to the Descartes Specification Language
Panel I: High Assurance Engineering: The Good, the Bad, and the Ugly
High Assurance Engineering: The Good, the Bad, and the Ugly p. 50
Computer Security: The Good, the Bad, and the Ugly p. 52
Ten Practical Techniques for High Assurance Systems Engineering p. 55
Software on the Edge p. 57
Ensuring Quality in Distributed Multimedia Systems p. 60
Proving Refinement Transformations for Deriving High-Assurance Software p. 68
Investigating Rare-Event Failure Tolerance: Reductions in Future Uncertainty p. 78
Applying Engineering of Computer-Based Systems (ECBS) and Product Line Center (PLC) Approaches to the Development of Mission Critical Systems for the Department of Defense
Writing a User Functional Description for an Army Software Metrics Support Tool p. 93
A New Compositional Method for Condensed State-Space Verification p. 104
Selecting and Mapping Test Sequences from Formal Specifications of Concurrent Programs p. 112
PSRR: A Scheme for Time-Bounded Fault Tolerance in Distributed Object-Based Systems p. 120
The Department of Defense Science and Technology (SandT) Program p. 130
Adaptive Recovery for Mobile Environments p. 134
Fault Injection Experiments on Real-Time Protocols Using ORCHESTRA p. 142
A Hybrid Parallel Evaluation Model for Logic-Based Intelligent Systems p. 158
Transaction Integration for Reusable Hard Real-Time Components p. 166
Flow Analysis for Concurrent, Reactive, Real-Time Systems p. 176
Real-Time Multicast Connection Establishment over ATM Networks p. 184
Active Multimedia Communication Systems p. 194
A Framework for MLS Interoperability p. 198
A Multiversion Transaction Scheduler for Centralized Multilevel Secure Database Systems p. 206
Impact of Program Transformation on Software Reliability Assessment p. 214
Software Reliability Growth Analysis - Application of NHPP Models and Its Evaluation  p. 222

A Practical Approach to Failure Mode, Effects and Criticality Analysis (FMECA) for Computing Systems  p. 228
A Tree-Based Classification Model for Analysis of a Military Software System  p. 244
Data-Flow Transformations to Detect Results which are Corrupted by Hardware Faults  p. 279

Using PVS to Analyze Hierarchical State-Based Requirements for Completeness and Consistency  p. 252
A General Approach to Secure Components Composition  p. 263
Author Index  p. 287

Table of Contents provided by Blackwell's Book Services and R.R. Bowker. Used with permission.