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Nota di contenuto

Invited Contributions -- Esterel v7: From Verified Formal Specification to Efficient Industrial Designs -- Checking Memory Safety with Blast -- Web Services -- Analyzing Web Service Based Business Processes --

Automatic Conformance Testing of Web Services -- Graph Grammars and Graph Transformations -- Termination Criteria for Model Transformation -- Ensuring Structural Constraints in Graph-Based Models with Type Inheritance -- Modelling Parametric Contracts and the State Space of Composite Components by Graph Grammars -- Components -- Improving the Build Architecture of Legacy C/C++

Software Systems -- Using Scenarios to Predict the Reliability of Concurrent Component-Based Software Systems -- Augmenting UML Models for Composition Conflict Analysis -- A Tool to Automate Component Clustering and Identification -- Product Lines -- Managing Variability Using Heterogeneous Feature Variation Patterns -- Color-Blind Specifications for Transformations of Reactive Synchronous

Programs -- Theory -- On the Correspondence Between Conformance Testing and Regular Inference -- Observational Purity and

Encapsulation -- Towards a Theory on the Role of Ontologies in Software Engineering Problem Solving -- Code Understanding and Validation -- A Framework for Counterexample Generation and

Exploration -- Using Annotations to Check Structural Properties of Classes -- Improving System Understanding via Interactive, Tailorable,

Source Code Analysis -- Kaveri: Delivering the Indus Java Program Slicer to Eclipse -- The UML -- Non-local Choice and Beyond: Intricacies of MSC Choice Nodes -- Coverage Criteria for Testing of Object Interactions in Sequence Diagrams -- Tools for Secure Systems Development with UML: Security Analysis with ATPs -- Maintaining Life Perspectives During the Refinement of UML Class Structures -- Automatic Proofs and Provers -- Automated Compositional Proofs for Real-Time Systems -- Iterative Circular Coinduction for CoCasl in Isabelle/HOL -- Formalisation and Verification of Java Card Security Properties in Dynamic Logic.

## Sommario/riassunto

ETAPS 2005 was the eighth instance of the European Joint Conferences on Theory and Practice of Software. ETAPS is an annual federated conference that was established in 1998 by combining a number of existing and new conf- ences. This year it comprised? ve conferences (CC, ESOP, FASE, FOSSACS, TACAS), 17 satellite workshops (AVIS, BYTECODE, CEES, CLASE, CMSB, COCV, FAC, FESCA, FINCO, GCW-DSE, GLPL, LDTA, QAPL, SC, SLAP, TGC, UITP), seven invited lectures (not including those that were speci?c to the satellite events), and several tutorials. We received over 550 submissions to the ?ve conferences this year, giving acceptance rates below 30% for each one. Congratulations to all the authors who made it to the ?nal program! I hope that most of the other authors still found a way of participating in this exciting event and I hope you will continue submitting. The events that comprise ETAPS address various aspects of the system - velopment process, including speci?cation, design, implementation, analysis and improvement. The languages, methodologies and tools which support these - tivities are all well within its scope. Di?erent blends of theory and practice are represented, with an inclination towards theory with a practical motivation on the one hand and soundly based practice on the other. Many of the issues involved in software design apply to systems in general, including hardware s- tems, and the emphasisons of tware is not intended to be exclusive.