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   Collana   Lecture Notes in Computer Science, , 0302-9743 ; ; 1783

   Disciplina   005.1

   Soggetti   Software engineering
                       Programming languages (Electronic computers)
                       Computer logic
                       Software Engineering/Programming and Operating Systems
                       Software Engineering
                       Programming Languages, Compilers, Interpreters
                       Logics and Meanings of Programs

   Lingua di pubblicazione   Inglese

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   Livello bibliografico   Monografia

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   Nota di bibliografia   Includes bibliographical references at the end of each chapters and
                       index.

   Nota di contenuto   Invited Papers -- Essay on Software Engineering at the Turn of Century
                       -- Memex Is Not Enough -- From Play-In Scenarios to Code: An
                       Achievable Dream -- Real-Time Systems -- Parallel Refinement
                       Mechanisms for Real-Time Systems -- Applying RT-Z to Develop
                       Safety-Critical Systems -- A Process Algebra for Real-Time Programs
                       -- Formally Engineering Systems -- System Fault Tolerance
                       Specification: Proposal of a Method Combining Semi-formal and Formal
                       Approaches -- Structuring and Design of Reactive Systems Using RSDS
                       and B -- Using Domain-Specific Languages for the Realization of
                       Component Composition -- Software Engineering -- Analysing UML
                       Active Classes and Associated State Machines - A Lightweight Formal
                       Approach -- Software as Learning: Quality Factors and Life-Cycle
                       Revised -- What Is 'Mathematicalness' in Software Engineering? -- A

Formal Approach to Heterogeneous Software Modeling -- Object Orientation -- Formal Specification of Object-Oriented Meta-modelling -- Verification of Object Oriented Programs Using Class Invariants -- Verification of Object-Z Specifications by Using Transition Systems: Application to the Radiomobile Network Design Problem -- A Model for Describing Object-Oriented Systems from Multiple Perspectives -- Formally Engineering Systems -- Stepwise Introduction and Preservation of Safety Properties in Algebraic High-Level Net Systems -- Theory and Applications -- Ready-Simulation Is Not Ready to Express a Modular Refinement Relation -- Java Program Verification via a Hoare Logic with Abrupt Termination -- Foundations for Software Configuration Management Policies Using Graph Transformations -- Analyzing Non-functional Properties of Mobile Agents -- Case Studies -- Specification of an Automatic Manufacturing System: A Case Study in Using Integrated Formal Methods -- A Case Study on Using Automata in Control Synthesis -- Demonstrations -- Formal System Development with KIV -- More About TAS and IsaWin — Tools for Formal Program Development -- Using Maude.

Sommario/riassunto	ETAPS2000wasthe third instanceofthe EuropeanJointConferenceson Theory and Practice of Software. ETAPS is an annual federated conference that was established in 1998 by combining a number of existing and new conferences. This year it comprised v e conferences (FOSSACS, FASE, ESOP, CC, TACAS), ve satellite workshops (CBS, CMCS, CoFI, GRATRA, INT), seven invited lectures, a panel discussion, and ten tutorials. 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. Die rent blends of theory and practice are represented, with an inclination towards theory with a practical motivation on one hand and soundly-based practice on the other. Many of the issues involved in software design apply to systems in general, including hardware systems, and the emphasis on software is not intended to be exclusive.