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Disciplina	005.13/3
Soggetti	Computers Computer communication systems Special purpose computers Software engineering Programming languages (Electronic computers) Computer logic Theory of Computation Computer Communication Networks Special Purpose and Application-Based Systems Software Engineering Programming Languages, Compilers, Interpreters Logics and Meanings of Programs
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Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Performance -- Looking for Better Integration of Design and Performance Engineering -- Scenario-Based Performance Engineering with UCMNAV -- Evolution -- Using SDL for Modeling Behavior Composition -- A Real-Time Profile for UML and How to Adapt It to SDL -- MSC Connectors — The Chamber of Secrets -- Development -- Industrial Application of the SDL-Pattern Approach in UMTS Call Processing Development — Experience and Quantitative Assessment — -- Synthesizing SDL from Use Case Maps: An Experiment -- Enhanced SDL Subset for the Design and Implementation of Java-Enabled

Embedded Signalling Systems -- Modeling -- Generating a Compiler for SDL from the Formal Language Definition -- Modelling and Evaluation of a Network on Chip Architecture Using SDL -- Formalizing Graphical Service Descriptions Using SDL -- Timing -- Specification and Simulation of Real Time Concurrent Systems Using Standard SDL Tools -- RMTP2: Validating the Interval Timed Extension for SDL with an Industrial-Size Multicast Protocol -- Refining Timed MSCs -- Validation -- Using Projections for the Detection of Anomalous Behaviors -- Applying Mutation Analysis to SDL Specifications -- Automatic Formal Model Generation and Analysis of SDL -- Design -- Applying SDL to Formal Analysis of Security Systems -- Development of Distributed Systems with SDL by Means of Formalized APIs -- Applications -- Validation of SIP/H.323 Interworking Using SDL/MSC -- Modeling IETF Session Initiation Protocol and Its Services in SDL -- Automated Generation of Marshaling Code from High-Level Specifications -- SAM 2002 Design Winner -- The Winning Entry of the SAM 2002 Design Contest.

Sommario/riassunto

This volume contains the papers presented at the 11th SDL Forum, Stuttgart. As well as the papers, the 11th SDL Forum also hosted a system design competition sponsored by Solinet with a cash prize for the "best" design. This follows a similar competition at the SAM 2002 workshop (papers published in LNCS 2599). The winning entry from SAM 2002 is described in the last paper in this volume. The SDL Forum was first held in 1982, and then every two years from 1985. Initially the Forum was concerned only with the Specification and Description Language first standardized in the 1976 Orange Book of the International Telecommunication Union (ITU). From the start this graphical CEFSM (communicating extended finite state machines) notation was used both to describe the implementation of systems and to specify systems (especially protocol systems in standards). In the early days both types of description were quite informal, though specifications were certainly more formal than the main alternative: natural language with some ad hoc figures. Implementations were usually written in assembly language, which is at too low a level to reason well about the interaction between communicating agents within a system. In this case the notation provided an intermediate description that gave an overview of how the implementation worked, and often the actual logical development was done at the graphical level with hand coding of that description.
