Record Nr. UNISA996465984903316 Model Driven Engineering Languages and Systems: 13th International **Titolo** Conference, MODELS 2010, Oslo, Norway, October 3-8, 2010. Proceedings, Part I / / edited by Dorina C. Petriu, Nicolas Rouquette, Oystein Haugen Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2010 **ISBN** 1-280-38957-5 9786613567499 3-642-16145-6 Edizione [1st ed. 2010.] Descrizione fisica 1 online resource (XXI, 424 p. 173 illus.) Collana Programming and Software Engineering;; 6394 006.7/4 Disciplina Soggetti Computer programming Software engineering Computer engineering Programming languages (Electronic computers) Architecture, Computer Programming Techniques Software Engineering/Programming and Operating Systems Computer Engineering Software Engineering Programming Languages, Compilers, Interpreters Computer System Implementation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Keynote 1 -- A Unified Approach to Modeling and Programming --Session 1a: Genericity and Generalization -- Generic Meta-modelling with Concepts, Templates and Mixin Layers -- An Observer-Based Notion of Model Inheritance -- MDE-Based Approach for Generalizing Design Space Exploration -- Session 1b: Model Migration and

Incremental Manipulation -- A Comparison of Model Migration Tools -- Incremental Evaluation of Model Queries over EMF Models -- Active

Operations on Collections -- Session 1c: Modeling Model Transformations -- transML: A Family of Languages to Model Model Transformations -- Henshin: Advanced Concepts and Tools for In-Place EMF Model Transformations -- A Technique for Automatic Validation of Model Transformations -- Session 2a: Verifying Consistency and Conformance -- Static- and Dynamic Consistency Analysis of UML State Chart Models -- Verifying Semantic Conformance of State Machine-to-Java Code Generators -- A Dynamic-Priority Based Approach to Fixing Inconsistent Feature Models -- Session 2b: Taming Modeling Complexity -- Taming Graphical Modeling -- Taming EMF and GMF Using Model Transformation -- A Visual Traceability Modeling Language -- Session 2c: Modeling User-System Interaction --Application Logic Patterns – Reusable Elements of User-System Interaction -- A Metamodel-Based Approach for Automatic User Interface Generation -- Rapid UI Development for Enterprise Applications: Combining Manual and Model-Driven Techniques --Session 3a: Model-Driven Quality Assurance -- Environment Modeling with UML/MARTE to Support Black-Box System Testing for Real-Time Embedded Systems: Methodology and Industrial Case Studies --Improving Test Models for Large Scale Industrial Systems: An Inquisitive Study -- Automatically Discovering Properties That Specify the Latent Behavior of UML Models -- Session 3b: Managing Variability --Towards a Semantics of Activity Diagrams with Semantic Variation Points -- An AADL-Based Approach to Variability Modeling of Automotive Control Systems -- Extending Variability for OCL Interpretation -- Session 3c: Multi-Modeling Approaches -- Intermodelling: From Theory to Practice -- Consistent Modeling Using Multiple UML Profiles -- A Systematic Review on the Definition of UML Profiles.

Sommario/riassunto

The MODELS series of conferences is the premier venue for the exchange of - novative technical ideas and experiences focusing on a very important new te- nical discipline: model-driven software and systems engineering. The expansion ofthisdisciplineisadirectconsequenceoftheincreasingsigni? canceandsuccess of model-based methods in practice. Numerous e? orts resulted in the invention of concepts, languages and tools for the de?nition, analysis,transformation, and veri?cationofdomain-speci? cmodelinglanguagesandgeneral-purposemodeling language standards, as well as their use for software and systems engineering. MODELS 2010, the 13th edition of the conference series, took place in Oslo, Norway, October 3-8, 2010, along with numerous satellite workshops, symposia and tutorials. The conference was fortunate to have three prominent keynote speakers: Ole Lehrmann Madsen (Aarhus University, Denmark), Edward A. Lee (UC Berkeley, USA) and Pamela Zave (AT&T Laboratories, USA). To provide a broader forum for reporting on scienti?c progress as well as on experience stemming from practical applications of model-based methods, the 2010 conference accepted submissions in two distinct tracks: Foundations and Applications. The primary objective of the ?rst track is to present new research results dedicated to advancing the state-of-the-art of the discipline, whereas the second aims to provide a realistic and veri?able picture of the current state-- the-practice of model-based engineering, so that the broader community could be better informed of the capabilities and successes of this relatively young discipline. This volume contains the? nal version of the papers accepted for presentation at the conference from both tracks.