Record Nr. UNISA996466058103316 Quality of Software Architectures [[electronic resource]]: Second **Titolo** International Conference on Quality of Software Architectures, QoSA 2006, Västeras, Schweden, June 27-29, 2006, Revised Papers / / edited by Christine Hofmeister, Ivica Crnkovic, Ralf H. Reussner Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2006 **ISBN** 3-540-48820-0 Edizione [1st ed. 2006.] Descrizione fisica 1 online resource (X, 218 p.) Programming and Software Engineering;; 4214 Collana Disciplina 004.2/2 Soggetti Software engineering Computer system failures Computer logic Computer communication systems Computers and civilization Software Engineering/Programming and Operating Systems System Performance and Evaluation Software Engineering Logics and Meanings of Programs Computer Communication Networks Computers and Society Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Abstracts of the Keynotes -- Expanding the Scope of Software Product Families: Problems and Alternative Approaches -- Composing with Style - Components Meet Architecture -- Abstracts of the Tutorials --Documentation Principles and Practices That You Can Live with --Model-Based Software Development with Eclipse -- Software Architecture Analysis and Evaluation -- Architecture Evaluation: Selecting Alternatives -- MEMS: A Method for Evaluating Middleware Architectures -- Evaluating Alternative COTS Assemblies from Imperfect Component Information -- Managing and Applying

Architectural Knowledge -- Building Up and Reasoning About

Architectural Knowledge -- Managing Architectural Design Decisions for Safety-Critical Software Systems -- Architectural Evaluation: Performance Prediction -- Runtime Prediction of Queued Behaviour -- Model Transformation in Software Performance Engineering -- Processes for Supporting Architecture Quality -- Traveling Architects -- A New Way of Herding Cats -- A Practical Architecture-Centric Analysis Process -- Models for Architecture Evaluation -- Embedded Systems Architecture: Evaluation and Analysis -- Parameter Dependent Performance Specifications of Software Components -- Architectural Evaluation -- Applying the ATAM to an Architecture for Decentralized Control of a Transportation System -- Towards an Integration of Standard Component-Based Safety Evaluation Techniques with SaveCCM.

Sommario/riassunto

Although the quality of a system's software architecture is one of the critical factors in its overall quality, the architecture is simply a means to an end, the end being the implemented system. Thus the ultimate measure of the quality of the software architecture lies in the implemented system, in how well it satis?es the system and project requirements and constraints and whether it can be maintained and evolved successfully. In order to treat design as a science rather thananart, we need to be able to address the quality of the software architecture directly, not simply as it is re?ected in the implemented system. Therefore, QoSA is concerned with software architecture quality directly by addressing the problems of: - Designing software architectures of good quality - De?ning, measuring, evaluating architecture quality -Managing architecture quality, tying it upstream to requirements and do- stream to implementation, and preserving architecture quality throughout the lifetime of the system Cross-cutting these problems is the question of the nature of software archit- ture. Software architecture organizes a system, partitioning it into elements and de? ning relationships among the elements. For this we often use multiple views, each with a di?erent organizing principle.