1. Record Nr. UNINA9910767504603321 B 2007: formal specification and development in B: 7th International **Titolo** Conference of B Users, Besancon, France, January 17-19, 2007: proceedings / / Jacques Julliand, Olga Kouchnarenko (eds.) Berlin; New York, : Springer, c2006 Pubbl/distr/stampa 3-540-68761-0 **ISBN** Edizione [1st ed. 2006.] Descrizione fisica 1 online resource (XIII, 297 p.) LNCS sublibrary. SL 2, Programming and software engineering Collana Lecture notes in computer science, , 0302-9743 ; ; 4355 Altri autori (Persone) JulliandJacques KouchnarenkoOlga Disciplina 004.2/4 Soggetti B method (Computer science) Debugging in computer science 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 Invited Talks -- E-Voting and the Need for Rigourous Software Engineering – The Past, Present and Future -- Using B Machines for Model-Based Testing of Smartcard Software -- The Design of Spacecraft On-Board Software -- Regular Papers -- Interpreting Invariant Composition in the B Method Using the Spec# Ownership Relation: A Way to Explain and Relax B Restrictions -- Chorus Angelorum -- Augmenting B with Control Annotations -- Justifications for the Event-B Modelling Notation -- Automatic Translation from Combined B and CSP Specification to Java Programs -- Symmetry Reduction for B by Permutation Flooding -- Instantiation of Parameterized Data Structures for Model-Based Testing -- Verification of LTL on B Event Systems -- Patterns for B: Bridging Formal and Informal Development -- Time Constraint Patterns for Event B Development -- Modelling and Proof Analysis of Interrupt Driven Scheduling -- Refinement of Statemachines Using Event B Semantics --Formal Transformation of Platform Independent Models into Platform Specific Models -- Refinement of eb 3 Process Patterns into B Specifications -- Security Policy Enforcement Through Refinement Process -- Integration of Security Policy into System Modeling --

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Sommario/riassunto

TheseproceedingsrecordthepaperspresentedattheSeventhInternationalC - ference of B Users (B 2007), held in the city of Besan, con in the east of France. This conference was built on the success of the previous six conferences in this series, B 1996, held at the University of Nantes, France: B 1998, held at the University of Montpellier, France: ZB 2000. held at the University of York, UK; ZB 2002, held at the University of Grenoble, France; ZB 2003, held at the U- versity of Turku, Finland; ZB 2005 held at the University of Surrey, Guildford, UK. B 2007 was held in January at the University of Franche-Comt' e.Besan con, France. hosted by the Computer Science Department (LIFC). LIFC has always placed particular emphasis on the applicability of its research and its relati- ship with industrial partners. In this context, it created in 2003 a company called LEIRIOS Technologies, which produces an automatic test generator tool (LTG) frommodels described in the B speci? cationlanguage. Other members of LIFC work on extensions of the B method for specifying and verifying dynamic properties. All the submitted papers in these proceedings were peer reviewed by at least three reviewers drawn from the B committee, depending on the subject matter of the paper. The authorsof the papersforB 2007werefrom Australia, Canada, Finland, Germany, France, Switzerland, and the UK. The conference featured a range of contributions by distinguished invited speakers drawn from both ind- try and academia.