

1. Record Nr.	UNISA996465287103316
Titolo	Theorem Proving in Higher Order Logics [[electronic resource] ] : 20th International Conference, TPHOLs 2007, Kaiserslautern, Germany, September 10-13, 2007, Proceedings // edited by Klaus Schneider, Jens Brandt
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2007
ISBN	3-540-74591-2
Edizione	[1st ed. 2007.]
Descrizione fisica	1 online resource (VIII, 404 p.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 4732
Disciplina	005.115
Soggetti	Computer science Machine theory Software engineering Artificial intelligence Logic design Theory of Computation Formal Languages and Automata Theory Computer Science Logic and Foundations of Programming Software Engineering Artificial Intelligence Logic Design
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	On the Utility of Formal Methods in the Development and Certification of Software -- Formal Techniques in Software Engineering: Correct Software and Safe Systems -- Separation Logic for Small-Step cminor -- Formalising Java's Data Race Free Guarantee -- Finding Lexicographic Orders for Termination Proofs in Isabelle/HOL -- Formalising Generalised Substitutions -- Extracting Purely Functional Contents from Logical Inductive Types -- A Modular Formalisation of Finite Group Theory -- Verifying Nonlinear Real Formulas Via Sums of Squares -- Verification of Expectation Properties for Discrete Random Variables in HOL -- A Formally Verified Prover for the Description Logic

-- Proof Pearl: The Termination Analysis of Terminator -- Improving the Usability of HOL Through Controlled Automation Tactics -- Verified Decision Procedures on Context-Free Grammars -- Using XCAP to Certify Realistic Systems Code: Machine Context Management -- Proof Pearl: De Bruijn Terms Really Do Work -- Proof Pearl: Looping Around the Orbit -- Source-Level Proof Reconstruction for Interactive Theorem Proving -- Proof Pearl: The Power of Higher-Order Encodings in the Logical Framework LF -- Automatically Translating Type and Function Definitions from HOL to ACL2 -- Operational Reasoning for Concurrent Caml Programs and Weak Memory Models -- Proof Pearl: Wellfounded Induction on the Ordinals Up to  $\aleph_0$  -- A Monad-Based Modeling and Verification Toolbox with Application to Security Protocols -- Primality Proving with Elliptic Curves -- HOL2P - A System of Classical Higher Order Logic with Second Order Polymorphism -- Building Formal Method Tools in the Isabelle/Isar Framework -- Simple Types in Type Theory: Deep and Shallow Encodings -- Mizar's Soft Type System.

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