1.	Record Nr.	UNISA996465719703316
	Titolo	Mathematics of Program Construction [[electronic resource]] : 7th International Conference, MPC 2004, Stirling, Scotland, UK, July 12-14, 2004, Proceedings / / edited by Dexter Kozen, Carron Shankland
	Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2004
	ISBN	3-540-27764-1
	Edizione	[1st ed. 2004.]
	Descrizione fisica	1 online resource (X, 404 p.)
	Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 3125
	Disciplina	004.2/1/0151
	Soggetti	Software engineering Computer logic Mathematical logic Computers Programming languages (Electronic computers) Software Engineering/Programming and Operating Systems Logics and Meanings of Programs Mathematical Logic and Formal Languages Software Engineering Computation by Abstract Devices Programming Languages, Compilers, Interpreters
	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 at the end of each chapters and index.
	Nota di contenuto	Invited Talk -- Extended Static Checking for Java -- Contributed Papers -- Constructing Polymorphic Programs with Quotient Types -- Optimizing Generic Functions -- Inferring Type Isomorphisms Generically -- Friends Need a Bit More: Maintaining Invariants Over Shared State -- Chasing Bottoms -- Describing Gen/Kill Static Analysis Techniques with Kleene Algebra -- A Free Construction of Kleene Algebras with Tests -- Streaming Representation-Changers -- Probabilistic Predicative Programming -- An Algebra of Scans -- Compiling Exceptions Correctly -- Modelling Nondeterminism -- Lazy Kleene Algebra -- Augmenting Types with Unbounded Demonic and

Angelic Nondeterminacy -- An Injective Language for Reversible Computation -- Prototyping Generic Programming in Template Haskell -- Transposing Relations: From Maybe Functions to Hash Tables -- Pointer Theory and Weakest Preconditions without Addresses and Heap -- Travelling Processes.

| Sommario/riassunto | This volume contains the proceedings of MPC 2004, the Seventh International Conference on the Mathematics of Program Construction. This series of c- ferences aims to promote the development of mathematical principles and te- niquesthataredemonstrablyusefulinthe processofconstructingcomputerp- grams,whether implementedinhardwareorsoftware.Thefocus isontechniques that combine precision with conciseness, enabling programs to be constructed by formal calculation. Within this theme, the scope of the series is very diverse, including programmingmethodology, programspeci?cation and transformation, programming paradigms, programming calculi, and programming language - mantics. The quality of the papers submitted to the conference was in general very high, and the number of submissions was comparable to that for the previous conference. Each paper was refereed by at least four, and often more, committee members. This volume contains 19 papers selected for presentation by the program committee from 37 submissions, as well as the abstract of one invited talk: - tended Static Checking for Java by Greg Nelson, Imaging Systems Department, HP Labs, Palo Alto, California. The conference took place in Stirling, Scotland. The previous six conferences wereheld in1989inTwente, TheNetherlands;in1992inOxford,UK;in 1995in KlosterIrsee,Germany;in 1998in Marstrandnear Got ¨ eborg,Sweden;in2000in Pontede Lima, Portugal;and in 2002in Dagstuhl, Germany.The proceedingsof these conferences were published as LNCS 375, 669, 947, 1422, 1837, and 2386, respectively. |