Record Nr. UNISA996418289203316 Trends in Functional Programming [[electronic resource]]: 21st Titolo International Symposium, TFP 2020, Krakow, Poland, February 13–14, 2020, Revised Selected Papers / / edited by Aleksander Byrski, John Hughes Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-57761-9 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (X, 249 p. 781 illus., 45 illus. in color.) Theoretical Computer Science and General Issues, , 2512-2029;; Collana 12222 Disciplina 005.114 Computer programming Soggetti Computer engineering Computer networks Microprogramming Application software Artificial intelligence Compilers (Computer programs) **Programming Techniques** Computer Engineering and Networks Control Structures and Microprogramming Computer and Information Systems Applications Artificial Intelligence Compilers and Interpreters Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Domain-specific languages -- PaSe: An Extensible and Inspectable DSL for Micro-Animations -- BinderAnn: Automated Rei cation of Source Annotations for Monadic EDSLs -- Generating next step hints for task oriented programs using symbolic execution -- Debugging and testing -- Scaling Up Delta Debugging of Type Errors -- Flexible Formality:

Practical Experience with Agile Formal Methods -- White-Box Path

Generation in Recursive Programs -- Reasoning and effects -- A Proof Assistant Based Formalisation of a Subset of Sequential Core Erlang -- One-shot Algebraic Effects as Coroutines -- An equational modeling of asynchronous concurrent programming -- State will do -- Parallelism -- Placement Strategies: Structured Skeleton Composition with Location-Aware Remote Data.

## Sommario/riassunto

This book constitutes revised selected papers from the 21st International Symposium on Trends in Functional Programming, TFP 2020, which was held in Krakow, Poland, during February 13-14, 2020. The 11 full papers presented in this volume were carefully reviewed and selected from 22 submissions. They were organized in topical sections named: domain-specific languages; debugging and testing; reasoning and effects; and parallelism. The following chapters are available open access under a Creative Commons Attribution 4.0 International License via link.springer.com: Chapter 3: Generating next step hints for task oriented programs using symbolic execution by Nico Naus and Tim Steenvoorden, and Chapter 5: Flexible Formality Practical Experience with Agile Formal Methods by Philipp Kant et al .