Record Nr. UNISA996465614503316 Generative and Component-Based Software Engineering [[electronic **Titolo** resource]]: First International Symposium, GCSE'99, Erfurt, Germany, September 28-30, 1999. Revised Papers / / edited by Krzysztof Czarnecki, Ulrich W. Eisenecker Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2000 **ISBN** 3-540-40048-6 Edizione [1st ed. 2000.] Descrizione fisica 1 online resource (VIII, 225 p.) Collana Lecture Notes in Computer Science, , 0302-9743 ; ; 1799 Disciplina 005.1 Soggetti Software engineering Computer programming Programming languages (Electronic computers) Computer logic Software Engineering/Programming and Operating Systems Software Engineering **Programming Techniques** Programming Languages, Compilers, Interpreters Logics and Meanings of Programs 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 at the end of each chapters and index. Nota di contenuto Invited Paper -- A Survey and a Categorization Scheme of Automatic Programming Systems -- Aspects -- Using Reflective Logic Programming to Describe Domain Knowledge as an Aspect -- Aspect Weaving with Graph Rewriting -- Aspects in Distributed Environments -- Generative Approaches -- Lightweight and Generative Components I: Source-Level Components -- Scoping Constructs for Software Generators -- Efficient Object-Oriented Software with Design Patterns -- Language Composition -- Vanilla: an open language framework --From Macros to Reusable Generative Programming -- Aspect-Oriented Compilers -- Component-Oriented Language Idioms -- Dynamic

Component Gluing -- Recursive Types and Pattern-Matching in Java --

Sommario/riassunto

C++ Function Object Binders Made Easy -- Domain Analysis and Component-Based Development -- Customizable Domain Analysis --A Grey-Box Approach to Component Composition -- An XML Based Component Model for Generating Scientific Applications and Performing Large Scale Simulations in a Meta-computing Environment. In the past two years, the Smalltalk and Java in Industry and Education C- ference (STJA) featured a special track on generative programming. which was organized by the working group \Generative and Component-Based Software Engineering" of the \Gesellschaft fur " Informatik" FG 2.1.9 \Object-Oriented Software Engineering." This track covered a wide range of related topics from domain analysis, software system family engineering, and software product - nes, to extendible compilers and active libraries. The talks and keynotes directed towards this new software engineering paradigm received much attention and terest from the STJA audience. Hence the STJA organizers suggested enlarging this track, making it more visible and open to wider, international participation. This is how the GCSE symposium was born. The rst GCSE symposium attracted 39 submissions from all over the world. This impressive number demonstrates the international interest in generative programming and related elds. After a careful review by the program comm-tee, fteen papers were selected for presentation. We are very grateful to the members of the program committee, all of them renowned experts, for their dedication in preparing thorough reviews of the submissions. Special thanks go to Elke Pulvermuller and Andreas Speck, who proposed and organized a special conference event, the Young Researches Workshop (YRW). This workshop provided a unique opportunity for young scientists and Ph.D.