Record Nr. UNISA996465793503316 Modular Programming Languages [[electronic resource]]: Joint Modular **Titolo** Languages Conference, JMLC 2000 Zurich, Switzerland, September 6-8. 2000 Proceedings / / edited by Jürg Gutknecht, Wolfgang Weck Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2000 **ISBN** 3-540-44519-6 Edizione [1st ed. 2000.] 1 online resource (X, 302 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743 ; ; 1897 Collana 005.13 Disciplina Soggetti Programming languages (Electronic computers) Software engineering Computer programming Computer logic Operating systems (Computers) Programming Languages, Compilers, Interpreters Software Engineering/Programming and Operating Systems Software Engineering **Programming Techniques** Logics and Meanings of Programs **Operating Systems** 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 The Development of Procedural Programming Languages Personal Contributions and Perspectives -- The Development of Procedural Programming Languages Personal Contributions and Perspectives --Parallel and Distributed Computing -- Composable Message Semantics in Oberon -- Derivation of Secure Parallel Applications by Means of Module Embedding -- Mianjin: A Parallel Language with a Type System That Governs Global System Behaviour -- A Design Pattern and Programming Framework for Interactive Metacomputing -- Mobile Agents Based on Concurrent Constraint Programming -- Components -- Rethinking Our Trade and Science: From Developing Components to

Component-Based Development -- Explicit Namespaces -- Stand-Alone Messages -- The Design of a COM-Oriented Module System --Oberon as an Implementation Language for COM Components: A Case Study in Language Interoperability -- Modularisation of Software Configuration Management -- Extensions and Applications --Leonardo: A Framework for Modeling and Editing Graphical Components -- OMX-FS: An Extended File System Architecture Based on a Generic Object Model -- On Adding a Query Language to a Persistent Object System -- Project C2 - A Survey of an Industrial Embedded Application with Native Oberon for PC -- System Architecture and Design Using Co-operating Groups of Real and Abstract Components -- Compilers and Runtime Environments --Abstraction and Modularization in the BETA Programming Language --Design of Multilingual Retargetable Compilers: Experience of the XDS Framework Evolution -- Structuring a Compiler with Active Objects --A Multiprocessor Kernel for Active Object-Based Systems -- Evaluating the Java Virtual Machine as a Target for Languages Other Than Java --Building Your Own Tools: An Oberon Industrial Case-Study.

## Sommario/riassunto

The circleis closed. The European Modula-2 Conference was originally launched with the goal of increasing the popularity of Modula-2, a programming language created by Niklaus Wirth and his team at ETH Zuric "h as a successor of Pascal. For more than a decade, the conference has wandered through Europe, passing Bled, Slovenia, in1987,Loughborough,UK,in1990,Ulm,Germany,in1994,and Linz, Austria, in 1997. Now, at the beginning of the new millennium, it is back at its roots in Zuric "h, Switzerland. While traveling through space and time, the conference has mutated. It has widened its scope and changed its name to Joint Modular Languages Conference (JMLC). With an invariant focus, though, on modularsoftwareconstructioninteaching. research, and "outthere" in industry. This topic has never been more important than today, ironically not because of insu?cient language support but, quite on the contrary, due to a truly c- fusing variety of modular concepts o?ered by modern languages: modules, pa- ages, classes, and components, the newest and still controversial trend. "The recent notion of component is still very vaguely de?ned, so vaguely, in fact, that it almost seems advisable to ignore it." (Wirth in his article "Records, Modules, Objects, Classes, Components" in honor of Hoare's retirement in 1999). Clar- cation is needed.