Record Nr. UNISA996465576803316 Attribute Grammars and their Applications [[electronic resource]]: **Titolo** International Conference, Paris, France, September 19-21, 1990 / / edited by Pierre Deransart, Martin Jourdan Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 1990 **ISBN** 3-540-46666-5 Edizione [1st ed. 1990.] Descrizione fisica 1 online resource (VIII, 361 p.) Lecture Notes in Computer Science, , 0302-9743 ; ; 461 Collana 005.13 Disciplina Soggetti Natural language processing (Computer science) Mathematical logic Programming languages (Electronic computers) Computer programming Software engineering Computer science—Mathematics Natural Language Processing (NLP) Mathematical Logic and Formal Languages Programming Languages, Compilers, Interpreters **Programming Techniques** Software Engineering Symbolic and Algebraic Manipulation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto The genesis of attribute grammars -- The hierarchy of LR-attributed grammars -- Space optimization in the FNC-2 attribute grammar system -- Counting polyominoes using attribute grammars -- Parallel attribute evaluation: structure of evaluators and detection of paralleism -- Parallel one-pass compilation -- Attribute grammar applications in prototyping LOTOS tools -- Rapid development of a program

transformation system with attribute grammars and dynamic

transformations -- Tree transformations, functional languages, and attribute grammars -- The project on Extended Affix Grammars at

Nijmegen -- Abstract interpretation using attribute grammars -- Functional evaluation of strongly non circular typol specifications -- Object oriented extension of attribute grammars and its implementation using distributed attribute evaluation algorithm -- Incremental attribute evaluation for multiple subtree replacements in structure-oriented environments -- Coordinated incremental attribute evaluation on a DR-threaded tree -- The OLGA attribute grammar description language: Design, implementation and evaluation -- The Elegant compiler generator system -- Use of attribute grammars in compiler construction -- An OPTRAN-generated front-end for Ada -- Attributed translation and the semantics of natural language -- Application of attribute grammars to natural language sentence generation -- Attribute grammar specification for a natural language understanding interface -- Globally partitionable attribute grammars -- Concurrent incremental attribute evaluation.

Sommario/riassunto

Attribute grammars were introduced over twenty years ago, but they are still not as widely used as could have been hoped initially. This is particularly so in industry, despite their qualities as a specification tool. The aim of this International Workshop on Attribute Grammars and their Applications (WAGA), the first to be entirely devoted to this topic. was to show that they are still the subject of active research and now lead to important, useful and practical applications in various areas. The workshop covered all aspects of attribute grammars, with an emphasis on practical results. This volume includes the text of the three invited talks and 21 submitted papers presented at the workshop. This selection provides a wide view of the diverse research being done in the area. Topics include: - Fundamentals: efficient exhaustive and incremental at-tribute evaluation methods, parallel evaluation, space optimization, relationships with functional, logic and object-oriented programming, and systems. - Applications: compiler construction, natural language processing, and interactive program manipulation.