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| Soggetti | Programming languages (Electronic computers)<br>Programming Languages, Compilers, Interpreters |
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| Nota di contenuto | The stratified loose approach: A generalization of initial and loose semantics -- Algebraic data type and process specifications based on projection spaces -- Structuring theories on consequence -- Completion with history-dependent complexities for generated equations -- Jungle evaluation -- The ACT-system experiences and future enhancements -- The specification language of OBSCURE -- Algebraic specifications of reachable higher-order algebras -- Observing nondeterministic data types -- Initial behaviour semantics for algebraic specifications -- Partial algebras, subsorting, and dependent types -- Operational semantics of behavioural canons based on narrowing -- The algebraic specification of semicomputable data types. |
| Sommario/riassunto | The Fifth Workshop on Specification of Abstract Data Types took place 1-4 September 1987 in Gullane, near Edinburgh. This book contains papers based on selected talks presented at the workshop. The algebraic specification of abstract data types has been a flourishing topic in computer science since 1974. The main goal of work in this area is to evolve a methodology to support the design and formal development of reliable software. The particular approach taken builds upon concepts from universal algebra and elementary category theory. The core of this work has now stabilized to a great extent and is |

mature enough to find application in real-life software engineering and to related topics such as concurrency, databases, and even hardware design. Such applications are becoming more feasible because of the emergence of integrated specification/development environments which include tools such as theorem provers based on fast term rewriting engines. Researchers are also exploring ways of widening the scope of the theory to make it applicable to (for example) higher-order functions and non-deterministic programs. Another trend is toward taking a more general view which allows superficially different approaches having the same general aims and methods to be unified.