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   Disciplina   005.4/3

   Soggetti   Computer programming
                        Computer engineering
                        Programming languages (Electronic computers)
                        Operating systems (Computers)
                        Computer memory systems
                        Data structures (Computer science)
                        Programming Techniques
                        Computer Engineering
                        Programming Languages, Compilers, Interpreters
                        Operating Systems
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   Note generali   Bibliographic Level Mode of Issuance: Monograph

   Nota di contenuto   Uniprocessor garbage collection techniques -- Collection schemes for
                        distributed garbage -- Dynamic memory management for sequential
                        logic programming languages -- Comprehensive and robust garbage
                        collection in a distributed system -- Experience with a fault-tolerant
                        garbage collector in a distributed lisp system -- Scalable distributed
                        garbage collection for systems of active objects -- Distributed garbage
                        collection of active objects with no global synchronisation -- Memory
                        management for parallel tasks in shared memory -- Incremental multi-
                        threaded garbage collection on virtually shared memory architectures

-- Generational garbage collection for lazy graph reduction -- A conservative garbage collector with ambiguous roots for static typechecking languages -- An efficient implementation for coroutines -- An implementation of an applicative file system -- A compile-time memory-reuse scheme for concurrent logic programs -- Finalization in the collector interface -- Precompiling C++ for garbage collection -- GC-cooperative C++ -- Dynamic revision of choice points during garbage collection in prolog [II/III] -- Ecological memory management in a continuation passing prolog engine -- Replication-based incremental copying collection -- Atomic incremental garbage collection -- Incremental collection of mature objects -- Object type directed garbage collection to improve locality -- Allocation regions & implementation contracts -- A concurrent generational garbage collector for a parallel graph reducer -- Garbage collection in Aurora: An overview -- Collections and garbage collection -- Memory management and garbage collection of an extended common lisp system for massively parallel SIMD architecture -- NREVERSAL of fortune — The thermodynamics of garbage collection.

| Sommario/riassunto | This is the first book entirely dedicated to the problem of memory management in programming language implementation. Its originality stems from the diversity of languages and approaches presented: functional programming, logic programming, object oriented programming, and parallel and sequential programming. The book contains 29 selected and refereed papers including 3 survey papers, 4 on distributed systems, 4 on parallelism, 4 on functional languages, 3 on logic programming languages, 3 on object oriented languages, 3 on incremental garbage collection, 2 on improving locality, 2 on massively parallel architectures, and an invited paper on the thermodynamics of garbage collection. The book provides a snapshot of the latest research in the domain of memory management for high-level programming language implementations. |