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Titolo	Simulated Evolution and Learning [[electronic resource] ] : First Asia-Pacific Conference, SEAL'96, Taejon, Korea, November 9-12, 1996. Selected Papers. // edited by Xin Yao, Jong-Hwan Kim, Takeshi Furuhashi
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ISBN	3-540-69538-9
Edizione	[1st ed. 1997.]
Descrizione fisica	1 online resource (X, 238 p.)
Collana	Lecture Notes in Artificial Intelligence ; ; 1285
Disciplina	006.3
Soggetti	Artificial intelligence Computer simulation Computers Bioinformatics Computational biology Computational complexity Artificial Intelligence Simulation and Modeling Computation by Abstract Devices Computer Appl. in Life Sciences Complexity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Emergent phenomena and computer worlds -- Top-down evolutionary engineering -- Function optimization using evolutionary programming with self-adaptive cultural algorithms -- An adaptive evolutionary algorithm for numerical optimization -- Lagrangian-based evolutionary programming for constrained optimization -- Selection of input variables of fuzzy model using genetic algorithm with quick fuzzy inference -- Entropic sampling in genetic-entropic algorithm -- Computational and learning synergies with a coevolving multilevel architecture -- Evolving state and memory in genetic programming -- Evolutionary CT image reconstruction by image partitioning -- Genetic

learning of the irrigation cycle for water flow in cropped soils -- Optimization of parameters of color image segmentation using evolutionary programming -- Genetic algorithms for solving multiprocessor scheduling problems -- A study on co-evolutionary learning of neural networks -- Knowledge acquisition of fuzzy control rules for mobile robots using DNA coding method and pseudo-bacterial GA -- Evolutionary learning algorithm for projection neural networks -- EPNet for chaotic time-series prediction -- Would and should government lie about economic statistics: simulations based on evolutionary cellular automata -- A technique for improving the convergence characteristic of genetic algorithms and its application to a genetic-based load flow algorithm -- Knowledge extraction using neural network by an artificial life approach -- An inference method using multiple patterns and modification of pattern space -- Random search based on genetic operators -- Hybrid evolutionary learning of fuzzy logic and genetic algorithm -- Fuzzy identification of unknown systems based on GA -- Competitive co-evolution model on the acquisition of game strategy.

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### Sommario/riassunto

This book constitutes the thoroughly refereed post-conference documentation of the First Asia-Pacific Conference on Simulated Evolution and Learning, SEAL'96, held in Taejeon, Korea, in November 1996. The 23 revised full papers were selected for inclusion in this book on the basis of 2 rounds of reviewing and improvements. Also included are invited papers by John L. Casti and Lawrence J. Fogel. The volume covers a wide range of current topics in simulated evolution and learning e.g. evolutionary optimization, evolutionary learning, artificial life, hybrid evolutionary fuzzy systems, evolutionary artificial neural networks, co-evolution, novel evolutionary approaches to computer tomography image reconstruction, power systems load flow control, and water flow control in cropped soils.

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