

1. Record Nr.	UNINA9910143464903321
Titolo	Simulated evolution and learning : second Asia-Pacific Conference on Simulated Evolution and Learning, SEAL '98, Canberra, Australia, November 24-27, 1998 ; selected papers // Bob McKay [and four others], editors
Pubbl/distr/stampa	Berlin ; ; Heidelberg : , : Springer, , [1999] Â©1999
ISBN	3-540-48873-1
Edizione	[1st ed. 1999.]
Descrizione fisica	1 online resource (XIV, 478 p.)
Collana	Lecture Notes in Artificial Intelligence ; ; 1585
Disciplina	006.3823
Soggetti	Evolutionary programming (Computer science)
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 and index.
Nota di contenuto	Natural Computation -- Multiple Lagrange Multiplier Method for Constrained Evolutionary Optimization -- Robust Evolution Strategies -- Hybrid Genetic Algorithm for Solving the p-Median Problem -- Correction of Reflection Lines Using Genetic Algorithms -- Adaptation under Changing Environments with Various Rates of Inheritance of Acquired Characters -- Dynamic Control of Adaptive Parameters in Evolutionary Programming -- Information Operator Scheduling by Genetic Algorithms -- Solving Radial Topology Constrained Problems with Evolutionary Algorithms -- Automating Space Allocation in Higher Education -- Application of Genetic Algorithm and k-Nearest Neighbour Method in Medical Fraud Detection -- Evolution of Reference Sets in Nearest Neighbor Classification -- Investigation of a Cellular Genetic Algorithm that Mimics Landscape Ecology -- Quantifying Neighborhood Preservation: Joint Properties of Evolutionary and Unsupervised Neural Learning -- Neural Networks and Evolutionary Algorithms for the Prediction of Thermodynamic Properties for Chemical Engineering -- Evolving FPGA Based Cellular Automata -- Asynchronous Island Parallel GA Using Multiform Subpopulations -- Multiple Sequence Alignment Using Parallel Genetic Algorithms -- Evolving Logic Programs to Classify Chess-Endgame Positions -- Genetic Programming with Active Data Selection -- Evolutionary

Programming-Based Uni-vector Field Method for Fast Mobile Robot Navigation -- Evolution with Learning Adaptive Functions -- Modelling Plant Breeding Programs as Search Strategies on a Complex Response Surface -- Generating Equations with Genetic Programming for Control of a Movable Inverted Pendulum -- A Hybrid Tabu Search Algorithm for the Nurse Rostering Problem -- Reinforcement Learning: Past, Present and Future -- A Reinforcement Learning with Condition Reduced Fuzz Rules -- Generality and Conciseness of Submodels in Hierarchical Fuzzy Modeling -- Using Evolutionary Programming to Optimize the Allocation of Surveillance Assets -- Applying the Evolutionary Neural Networks with Genetic Algorithms to Control a Rolling Inverted Pendulum -- Evolving Cooperative Actions Among Heterogeneous Agents by an Evolutionary Programming Method -- Cooperative Works for Welfare Agent Robot and Human Using Chaotic Evolutionary Computation -- Evolutionary Computation for Intelligent Agents Based on Chaotic Retrieval and Soft DNA -- A Study of Bayesian Clustering of a Document Set Based on GA -- An Evolutionary Approach in Quantitative Spectroscopy -- Evolutionary Recognition of Features from CAD Data -- Modeling Strategies as Generous and Greedy in Prisoner's Dilemma Like Games -- Using Genetic Algorithms to Simulate the Evolution of an Oligopoly Game -- An Evolutionary Study on Cooperation in N-person Iterated Prisoner's Dilemma Game -- Simulating a N-person Multi-stage Game for Making a State -- Learning from Linguistic Rules and Rule Extraction for Function Approximation by Neural Networks -- Can a Niching Method Locate Multiple Attractors Embedded in the Hopfield Network? -- Time Series Prediction by Using Negatively Correlated Neural Networks -- Animating the Evolution Process of Genetic Algorithms -- Analysis on the Island Model Parallel Genetic Algorithms for the Genetic Drifts -- A Paradox of Neural Encoders and Decoders or Why Don't We Talk Backwards? -- Continuous Optimization Using Elite Genetic Algorithms With Adaptive Mutations -- Evolutionary Systems Applied to the Synthesis of a CPU Controller -- Novel Models in Evolutionary Designing -- Co-evolution, Determinism and Robustness -- Co-operative Evolution of a Neural Classifier and Feature Subset -- Optimal Power Flow Method Using Evolutionary Programming -- Grammatical Development of Evolutionary Modular Neural Networks -- Hybridized Neural Network and Genetic Algorithms for Solving Nonlinear Integer Programming Problem -- Evolution of Gene Coordination Networks -- Adaptive Simulation: An Implementation Framework -- A Model of Mutual Associative Memory for Simulations of Evolution and Learning -- The Application of Cellular Automata to the Consumer's Theory: Simulating a Duopolistic Market -- Object-Oriented Genetic Algorithm Based Artificial Neural Network for Load Forecasting.

Sommario/riassunto

This volume contains selected papers presented at the Second Asia-Pacific Conference on Simulated Evolution and Learning (SEAL'98), from 24 to 27 November 1998, in Canberra, Australia. SEAL'98 received a total of 92 submissions (67 papers for the regular sessions and 25 for the applications sessions). All papers were reviewed by three independent reviewers. After review, 62 papers were accepted for oral presentation and 13 for poster presentation. Some of the accepted papers were selected for inclusion in this volume. SEAL'98 also featured a fully refereed special session on Evolutionary Computation in Power Engineering organised by Professor Kit Po Wong and Dr Loi Lei Lai. Two of the accepted papers are included in this volume. The papers included in these proceedings cover a wide range of topics in simulated evolution and learning, from self-adaptation to dynamic modelling, from reinforcement learning to agent systems, from evolutionary

games to evolutionary economics, and from novel theoretical results to successful applications, among others. SEAL'98 attracted 94 participants from 14 different countries, namely Australia, Belgium, Brazil, Germany, Iceland, India, Japan, South Korea, New Zealand, Portugal, Sweden, Taiwan, UK and the USA. It had three distinguished international scientists as keynote speakers, giving talks on natural computation (Hans-Paul Schwefel), reinforcement learning (Richard Sutton), and novel models in evolutionary design (John Gero). More information about SEAL'98 is still available at <http://www.cs.adfa.edu.au/conference/seal98/>.
