1.	Record Nr.	UNINA9910768175403321
	Titolo	Evolutionary Programming VI : 6th International Conference, EP 97, Indianapolis, Indiana, USA, April 13-16, 1997, Proceedings / / edited by Peter J. Angeline, Robert G. Reynolds, John R. McDonnell, Russ Eberhart
	Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1997
	ISBN	3-540-68518-9
	Edizione	[1st ed. 1997.]
	Descrizione fisica	1 online resource (X, 466 p.)
	Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 1213
	Disciplina	005.1
	Soggetti	Computer simulation Artificial intelligence Computer programming Computers Algorithms Computer networks Simulation and Modeling Artificial Intelligence Programming Techniques Computation by Abstract Devices Algorithm Analysis and Problem Complexity Computer Communication Networks
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Bibliographic Level Mode of Issuance: Monograph
	Nota di contenuto	Complexity formalisms, order and disorder in the structure of art -- Searching real-valued synaptic weights of Hopfield's associative memory using evolutionary programming -- The application of evolutionary computation to selected problems in molecular biology -- PEPNet: Parallel evolutionary programming for constructing artificial neural networks -- Scaling behavior of the evolution strategy when evolving neuronal control architectures for autonomous agents -- Swarm: An object oriented simulation platform applied to markets and

organizations -- An agent-based computational model for the evolution of trade networks -- Performance enhanced genetic programming -- Comparing subtree crossover with macromutation -- Musica ex machina: Composing 16th-century counterpoint with genetic programming and symbiosis -- Design of a high-gain operational amplifier and other circuits by means of genetic programming -- Modeling speculators with genetic programming -- Fast evolution strategies -- Airspace congestion smoothing by stochastic optimization -- Evolian: Evolutionary optimization based on lagrangian with constraint scaling -- Solving static and dynamic fuzzy constraint networks using evolutionary hill-climbing -- Applying family competition to evolution strategies for constrained optimization -- Multi-operator evolutionary programming: A preliminary study on function optimization -- Supporting polyploidy in genetic algorithms using dominance vectors -- An individually variable mutation-rate strategy for genetic algorithms -- Inductive learning of mutation step-size in evolutionary parameter optimization -- A note on the escape probabilities for two alternative methods of selection under Gaussian mutation -- Raising theoretical questions about the utility of genetic algorithms -- Some geometric and algebraic results on crossover -- An analysis of evolutionary algorithms based on neighbourhood and step sizes -- Structuring pattern generalization through evolutionary techniques -- A cultural algorithm framework to evolve multiagent cooperation with evolutionary programming -- Tracking extrema in dynamic environments -- The dynamics of evolution strategies in the optimization of traveling salesman problems -- Exploring self-adaptive methods to improve the efficiency of generating approximate solutions to traveling salesman problems using evolutionary programming -- Optimizing fuel distribution through evolutionary programming -- Investigating parallel genetic algorithms on job shop scheduling problems -- Using evolutionary programming for finite element problems -- Gaining insight into evolutionary programming through landscape visualization: An investigation into IIR filtering -- Evolution of intelligently interactive behaviors for simulated forces -- Combining robot control strategies using genetic algorithms with memory -- Using cultural algorithm with evolutionary computing to extract site location decisions from spatio-temporal databases.

Sommario/riassunto	This book constitutes the refereed proceedings of the 6th International Conference on Evolutionary Programming, EP 97, held in Indianapolis, IN, USA, in April 1997. The 36 revised full papers presented were carefully selected for inclusion in the proceedings. The papers are organized in sections on evolutionary methods for modeling and training, alternative frameworks for the computational study of evolutionary social systems, genetic programming: issues and applications, issues in evolutionary optimization, enhanced evolutionary operators, theory and analysis of evolutionary computations, issues in adaptability: theory and practice, and evolution and NP-hard problems.