



Genetic and Evolutionary Computation Conference 2006 Best Papers

The Track Chairs, Editor in Chief, and the Conference Chair nominated the papers that received the most nominations from Program Committee members and/or the highest evaluation scores for consideration by the conference. Best Paper winners were determined by ballot vote by attendees.

Ant Colony Optimization and Swarm Intelligence:

An Ant-Based Algorithm for Finding Degree-Constrained Minimum Spanning Tree

Thang N. Bui, Catherine M. Zrnecic

Artificial Immune Systems

Applicability Issues of the Real-Valued Negative Selection Algorithms

Zhou Ji, Dipankar Dasgupta

Artificial Life, Evolutionary Robotics, Adaptive Behavior

A Method for Parameter Calibration and Relevance Estimation in Evolutionary Algorithms

Volker Nannen, A.E. Eiben

Combination of Tracks

Probabilistic Modeling for Continuous EDA with Boltzmann Selection and Kullback-Leibler Divergence (Estimation of Distribution Algorithms Track)

Yunpeng Cai, Xiaomin Sun, Peifa Jia

Biological Applications

Genetic Programming for Human Oral Bioavailability of Drugs

Francesco Archetti, Stefano Lanzeni, Enza Messina, Leonardo Vanneschi

Coevolution

The Effects of Interaction Frequency on the Optimization Performance of Cooperative Coevolution

Elena Popovici, Kenneth De Jong

Evolution Strategies, Evolutionary Programming

On the Local Performance of Simulated Annealing and the (1+1) Evolutionary Algorithm

Thomas Jansen, Ingo Wegener

Evolutionary Combinatorial Optimization

A New Hybrid Evolutionary Algorithm for the k-cardinality Tree Problem

Christian Blum

Evolutionary Multiobjective Optimization

On The Effect of Populations in Evolutionary Multi-objective Optimization

Oliver Giel, Per Kristian Lehre

Genetic Algorithms

Comparing Evolutionary and Temporal Difference Methods in a Reinforcement Learning Domain

Matthew E. Taylor, Shimon Whiteson, Peter Stone

Genetic Programming

Alternative Evolutionary Algorithms for Evolving Programs

Darrell Whitley, Ross Beveridge, Marc Richards, Andre Barreto

Learning Classifier Systems and other Genetics-Based Machine Learning

Classifier Prediction based on Tile Coding

Pier Luca Lanzi, Daniele Loiacono, Stewart W Wilson, David E Goldberg

Real-World Applications

Multiobjective Genetic Algorithms for Multiscaling Excited State Direct Dynamics in Photochemistry

Kumara Sastry, D. D. Johnson, Alexis L. Thompson, David E. Goldberg, Todd J. Martinez, Jeff Leiding, Jane Owens

Search-Based Software Engineering

Search-based Determination of Refactorings for Improving the Class Structure of Object-Oriented Systems

Olaf Seng, Johannes Stammel, David Burkhart