coevolution, constraint handling, control system design, controlling search, design applications, devices developement and applications, dynamic and parallel ec, ec techniques, ecological modelling and information ecosystems, engineering applications, evolutionary markets, evolutionary scheduling, evolvable hardware, evolving neural networks, fitness, games and game like tasks, genetic algorithms, genetic programming, hybrid systems, image processing applications, image/ signal processing, intelligent agents, learning and search spaces, local search optimization, medical applications, multi-agent systems and cultural algorithms, multi-objective optimization, network applications, new paradigms, novel applications, novel themes, operations research applications, representations, revisiting the fossil record, robotic applications, stroganoff, system modeling and control, theory and foundations, time series

Robotics Search Space

algorithm

netcrawler, selective neutrality

Improved Numerical Optimization Optimization, Minimum Spanning Distances

Function Optimization

Species Conservation Distances, Parallel algorithm

Algorithms Using a Royal Road Function Population Size, Genetic Diversity

and Constrained Single Objective Optimization Problems

Electric Power Systems

Autonomous Mobile Robot Navigation Control

co-operative behaviour

Evolvability

design

via Evolutionary Computation computation

artificial immune systems

Constrains value components, PSpice

Algorithms

Swarming Approach

Multimodal Optimisation in GAs

Multi-Parents Crossover, Complexity

Problem simulated annealing

Neural Network and GA Machine learning

Reflexive Pattern Generators

Deterministic Weight Evolution Algorithm

Meteorological Data

Transform

Options, Futures Genetic Programming) on intra daily tick data for stock index options and futures arbitrage in a manner that is suitable for online trading when windows of profitable arbitrage opportunities exist for short periods from one to ten minutes. Our benchmark for FGP-2 is the textbook rule for detecting arbitrage profits. This rule has the drawback that it awaits a contemporaneous profitable signal to implement an arbitrage in the same direction. A novel methodology of randomised sampling is used to train FGP-2 to pick up the fundamental arbitrage patterns. Care is taken to fine tune weights in the fitness function to enhance performance. As arbitrage opportunities are few, missed opportunities can be as costly as wrong recommendations to trade. Unlike conventional genetic programs, FGP-2 has a constraint satisfaction feature supplementing the fitness function that enables the user to train the FGP to specify a minimum and a maximum number of profitable arbitrage opportunities that are being sought. Historical sample data on arbitrage opportunities enables the user to set these minimum and maximum bounds. Good FGP rules for arbitrage are found to make a 3-fold improvement in profitability over the textbook rule. This application demonstrates the success of FGP-2 in its interactive capacity that allows experts to channel their knowledge into machine discovery

Valve-stand algorithm, plumbing

Search, Search Space Contraction

Size Greater Than 1

mining, multi-objective optimization

Heuristics Related to Their Dynamic Behavior Forecast Heuristic, Biased Operators

Programming Problem Programming Problem, Metaheuristics

Modeling and Simulating High-Level Behavior Systems

Evolutionary Computation
Information
Artificial Neural Network
Mixed Pattern Generators
genetic algorithms
Financial Time Series
Real-life Problems
Instruction Generation instruction generation, microprocessor design verification, PowerPC
optimization
Evolution for Flexible Ligand Docking
Mutations spectroscopy, calibration
test, facility location problem
Carlo Simulations
Parameters GA, Polymer Melts
Principal Component Analysis
Problems
Multi-airfoil Design in Aerodynamics
and Its Application to Production Scheduling in a Petroleum Refinery
Strategies
Evolutionary Algorithm
Flash Memory Microprocessor, Flash Memory
Hardware hardware, mobile robot, Khepera
Evolvable Hardware
Genetic Algorithms principal component analysis, blend crossover
Phenomena by Extrapolative Search bias, deception
Constrained Optimization problems, Max/min k-clustering sum problems, Combinatorial optimization
Constraints
Distribution
by using Genetic Programming
Clustering to Image Segmentation
expansions, data mining
Network extraction
Targeting
Classification
learning classifier systems, financial investment
Rules classifier
for its Completeness and Optimality
Computations computations, Biological modeling, Cluster analysis, Distributive/parallel computing,
MPI, WWW
and Genetic Algorithms
Expression Data of DNA Microarrays
mixtures
detection, evolutionary algorithms, 2D-Lookup
its Effect self-organizing maps, geophysical simulation, sign test
Efficient Evaluation
Evaluation
Transform STROGANOFF, statistical fitness function
Approcximation Simultaneous Perturbation, Stochastic Approximation, Recursive Annealing
Problem
Constrained Optimization discrete-neighborhood saddle points, iterative deepening
and its Experimental Analysis
Search ECGI Problem, Genetic Local Search
Optimisation Problems
Optimal?
Optimization Problems
Assessments and Comparisons

Population Dynamics
Linear Architecture, but not a Non-Linear Architecture
a Market Selection Game multi-agent model
Report — Walking, Central Pattern Generator(CPG), Feedback Network
Robot
to Regulate the pH Value in a Pilot Plant
crossover, subtree mutation, operator biases
Linear Representations representation, size bias
coevolution
Genetic Algorithms
Scheduling Table
Breast Cancer Classification Using Mammogram and History Data
Characteristics in Phylogenetic Trees
interactions
Metabolic Pathways, Evolutionary Electronics
Suspension System
Three-dimensional Container Loading Problem Loading Problem, Bin Packing Problem, Diversity Control
application for pursuit-evasion games games
Its Application to Knapsack Problems Genetic Algorithms
Internet
Investigation of Clonal Selection with a Negative Selection Operator Nihing, Network Intrusion Detection
Internet Information Access Prisoner's Dilemma Game
Simulated Annealing Optimization
(GP) Evolution, Ant behaviors
communication network planning
on Immune and Entropy Principles Algorithm
Approach, Separation of Roles
Split/merge
Pseudo-Evolution Strategy
Extraction of Rules from Trained Networks Adaptation, Medical Diagnostic Systems
Neuromolecular System
Accelerated Function Optimization optimization
Decision Trees sampling
Algorithms
Against a Proportionally Guided Missile
Action Sequence
Problem algorithm, combinatorial optimization, knapsack problem
models, Nonlinear systems, Evolutionary computation
Utilizing PC Clustering optimization