References


https://github.com/iridia-ulb/references


Keywords: irace.


Keywords: decision-makers, Interactive methods, performance assessment, preference information, multiobjective optimization problems.


Keywords: Multi criteria decision making, Redundancy, objective reduction, Vector optimisation.


Keywords: many-objective evolutionary optimization.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Keywords: GGA.


Keywords: GGA++.


https://github.com/iridia-ulb/references


Keywords: Multicriteria Scheduling.


Keywords: QAP, EDA, Mallows.


Keywords: Treed-GP.


Keywords: mesh adaptive direct search; pattern search.


https://github.com/iridia-ulb/references


Keywords: digital annealer, multi-objective, bi-objective QAP, QUBO.


Keywords: F-race.


Annotation: Unreviewed paper.


Keywords: Genetic Edge Recombination (ERX).


Keywords: crashed simulation; latent gaussian process; automotive fan design; industrial application; GP classification; Expected Feasible Improvement with Gaussian Process Classification with signs; EFI GPC sign.

https://github.com/iridia-ulb/references


Keywords: Iterated Race.


https://github.com/iridia-ulb/references

Keywords: machine decision-maker.


Keywords: SPO.


Keywords: Mixed-effects models, random-effects model, problem instance generation.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Keywords: F-race.


Keywords: BC-EMOA.
Annotation: Errata: DTLZ6 and DTLZ7 in the paper are actually DTLZ7 and DTLZ8 in [769].


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references

Keywords: interactive, multi-objective, decision-makers.


Keywords: irace.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Annotation: Supervised by Marco Dorigo.


Annotation: Based on the PhD thesis [316].


Keywords: F-race.


Keywords: F-race, iterated F-race, irace, tuning.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


[https://github.com/iridia-ulb/references](https://github.com/iridia-ulb/references)


Annotation: Proposed SVM.


Keywords: multi-mode resource-constrained project scheduling, project scheduling, simulated annealing.


Keywords: meta-optimization, offline parameter optimization.


Keywords: multiple criteria decision making, evolutionary multiobjective optimization.


https://github.com/iridia-ulb/references


Keywords: Multi-objective optimization, Smart mobility, Traffic lights planning.


Annotation: Extended version published in [450].


Annotation: Extended version published in [445].

https://github.com/iridia-ulb/references


[466] Dimo Brockhoff, Dhish Kumar Saxena, Kalyanmoy Deb, and Eckart Zitzler. On Handling a Large Number of Objectives A Posteriori and During Optimization. In Joshua D.

https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Annotation: Published as [519].


https://github.com/iridia-ulb/references


Keywords: Estimation of distribution algorithms, Generalized Mallows model, Permutation flowshop scheduling problem, Permutations-based optimization problems.


Keywords: F-race.


Keywords: Portfolio optimisation, CCMVPOP, Efficient frontier.

https://github.com/iridia-ulb/references


Keywords: machine DM, interactive EMOA.


Annotation: two co-evolving populations (two archive).


Keywords: 2003 international timetabling competition, F-race.


Keywords: irace.


https://github.com/iridia-ulb/references


Keywords: multi-objective, surrogate models, epsilon, hypervolume.


Keywords: Hybrid algorithms, Evolutionary algorithms, Simulation optimization, Uncertainty, Traffic light planning.
Annotation: Extended version published in Evolutionary Computation journal [606].

Keywords: irace, Simulation optimization, Uncertainty, Traffic light planning.


https://github.com/iridia-ulb/references

Annotation: Proposed a reproducibility taxonomy, defined reproducibility and taxonomy.


**Keywords:** IGD.

**Annotation:** Introduces Inverted Generational Distance (IGD).


Annotation: multiplicity; multiple endpoints; multiple treatments; p-value adjustment; type I error; argues that if results are intended to be interpreted marginally, there may be no need for controlling experimentwise error rate.


https://github.com/iridia-ulb/references Page 53


Annotation: First mention of the term hyper-heuristic.


Keywords: reproducibility.


Keywords: NFL.


[700] Steven B. Damelin, Fred J. Hickernell, David L. Ragozin, and Xiaoyan Zeng. **On Energy, Discrepancy and Group Invariant Measures on Measurable Subsets of Euclidean Space.** *Journal of Fourier Analysis and Applications*, 16(6):813–839, 2010. Keywords: Capacity; Cubature; Discrepancy; Distribution; Group invariant kernel; Group invariant measure; Energy minimizer; Equilibrium measure; Numerical integration; Positive definite; Potential field; Riesz kernel; Reproducing Hilbert space; Signed measure.


https://github.com/iridia-ulb/references

Keywords: irace.


Keywords: simplex lattice design.


Keywords: ranking.


Keywords: F-race.


https://github.com/iridia-ulb/references
*Annotation:* Proposed Gaussian mutation.

*Annotation:* Proposed NSGA-III.


*Annotation:* Proposed R-NSGA-II.

*Keywords:* epsilon-dominance, archiving.

*Annotation:* Archiving method with epsilon dominance and density in the decision and objective spaces.


*Keywords:* DTLZ benchmark, Do not cite this TR! It is incorrect and it is superseded by [769].


Keywords: irace.


Annotation: This paper cannot be found on internet!! Does it exist?


https://github.com/iridia-ulb/references


**Keywords:** Evolutionary multi-objective optimization, Production planning, Robust optimization, Simulation-based optimization, Uncertainty modelling.

*Keywords:* Genetic algorithms, Combinatorial optimization, Production planning, Simulation-based optimization, Uncertainty modelling.


*Annotation:* Comments on [1843].


https://github.com/iridia-ulb/references


Keywords: metaheuristic; continuous optimization; global optimization; imagery; registration; ant colony algorithm; estimation of distribution algorithm; evolutionary computation; metaheuristic; optimisation continue; optimisation globale; imagerie; biomédical; recalage; algorithme de colonie de fourmis; algorithme à estimation de distribution; algorithme évolutionnaire.


Keywords: metaheuristics, evolutionary computation, software framework, automated algorithm design.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


*Annotation:* First to mention exponential number of nondominated solutions with respect to many objectives?


*Annotation:* Proposed GRASP.


*Keywords:* GRASP.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references

Annotation: http://mat.tepper.cmu.edu/blog/?p=1695.


Keywords: irace.


Annotation: BFGS.


Keywords: Mallows model, ranking, probabilistic models.


https://github.com/iridia-ulb/references


   *Annotation*: Proposed symmetric mean absolute percentage error (SMAPE).


   *Annotation*: Proposes MOGA and P-MOGA.


   *Annotation*: Proposed FON benchmark problem.


https://github.com/iridia-ulb/references


Keywords: Interactive optimization, Multi-objective optimization, Evolutionary optimization, Knapsack problem.


Keywords: Swarm robotics; Automatic design; AutoMoDe.


[https://github.com/iridia-ulb/references](https://github.com/iridia-ulb/references)


Keywords: clustering; affinity propagation.


Keywords: ant colony optimization, noisy fitness, run time analysis, theory.


Keywords: combinatorial optimization, heavy-tailed mutation, single-objective optimization, experiments-motivated theory, irace.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Annotation: fully dynamic and online algorithm selection technique, with no separate training phase: all candidate algorithms are run in parallel, while a model incrementally learns their runtime distributions.


Keywords: harmony search algorithm, traffic light scheduling.


https://github.com/iridia-ulb/references

**Keywords:** Cycle program optimization, Particle swarm optimization, Realistic traffic instances, SUMO microscopic simulator of urban mobility, Traffic light scheduling.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Keywords: multiple criteria decision making, evolutionary multiobjective optimization.


Keywords: parameter tuning.


https://github.com/iridia-ulb/references


Keywords: recursive feature elimination.


Keywords: stochastic dominance.


Keywords: epsilon-constraint method.

https://github.com/iridia-ulb/references


Keywords: theory, automatic configuration, capping.


Keywords: irace.


Keywords: Behavioral Biases, Behavioral Operational Research, Ethics in modelling, OR practice, Path dependence, Systems perspective.


https://github.com/iridia-ulb/references

Keywords: CMA-ES.


Keywords: Evolution strategies, Evolutionary algorithms, self-adaptation, stochastic processes, Covariance matrix, matrix algebra, derandomised adaptation, mutation distribution, rotation invariance, electronic switching systems.

Annotation: Proposed CMA-ES.


Annotation: http://coco.gforge.inria.fr/bbob2012-downloads.


Keywords: benchmarking, black-box optimization.


https://github.com/iridia-ulb/references


Keywords: support vector machine; metric regression; support vector learning; ordinal regression; information retrieval; risk functional; machine learning; pattern classification.

Annotation: Proposed the pairwise transform for learning-to-rank.


Keywords: archiving, multimodal.


Keywords: genetic algorithms, real coding, continuous search spaces, mutation, recombination.


Keywords: SOCO benchmark.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references Page 108
*Keywords*: BML model, Prediction, Real-time, Traffic jam, Urban traffic network.

*Keywords*: BML, Optimization, Simulation, Traffic congestion, Updating rules.


*Annotation*: Proposed the WFG benchmark suite.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Keywords: MIP, ParamILS.


Keywords: SMAC, ROAR.


Keywords: parameter importance.


Keywords: IANOVA, parameter importance.

https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Keywords: irace.


https://github.com/iridia-ulb/references


Keywords: multi-objectivization.


Keywords: evolutionary algorithm, evolutionary dynamic multi-objective optimisation, dynamic environment, Multi-objective optimisation.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references

Keywords: Bayesian optimization, constrained optimization, benchmarking, safety constraints, safe optimization.


Annotation: Published as a conference paper at the 3rd International Conference for Learning Representations, San Diego, 2015.


Annotation: Proposed Simulated Annealing.


Keywords: multiple criteria decision making, evolutionary multiobjective optimization.


Annotation: (Examiners: Prof. K. Deb and Prof. K. Warwick).


Keywords: ParEGO, online, metamodel.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Annotation: Proposed KUR benchmark.


https://github.com/iridia-ulb/references

Page 132


https://github.com/iridia-ulb/references


Keywords: racing.

https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Keywords: Ant colony optimization, Travelling salesman problem with time windows, Hybridization.

https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Keywords: Evolutionary Computation, Reproducibility, Empirical study, Benchmarking.

Keywords: Evolutionary Computation, Reproducibility, Empirical study, Benchmarking.

Keywords: Spacecraft Trajectory Optimization, Unbalanced Mallows Model, Combinatorial Efficient Global Optimization, Estimation of Distribution Algorithms, Bayesian Optimization.


Keywords: Combinatorics, heuristic based on priority rules, Multiproject scheduling, Operation Research/Decision Theory, Project management, project management software, Resource allocation, Theory of Computation.


Keywords: genetic algorithm, multi-mode resource-constrained project scheduling.


Keywords: SHAP, interpretable AI.


Keywords: Multiobjective combinatorial optimization, Hybrid metaheuristics, TSP, Local search, Speed-up techniques.


Annotation: Crowding archive.


https://github.com/iridia-ulb/references


Keywords: Global optimization, Heuristics, Harmony search algorithm, Mathematical programming.


Annotation: Discusses a priori (scalarized) methods.


https://github.com/iridia-ulb/references


Keywords: Gaussian processes, Kriging, Regression trees, Metamodelling, Surrogate, Pareto optimality.

https://github.com/iridia-ulb/references


Keywords: Algorithms, Software reliability, Certification.


https://github.com/iridia-ulb/references


*Annotation: TR: [http://hdl.handle.net/2003/26671](http://hdl.handle.net/2003/26671).*

[https://github.com/iridia-ulb/references](https://github.com/iridia-ulb/references)

*Keywords*: continuous optimization, landscape analysis, instance features.


*Keywords*: irace.


*Keywords*: Nevergrad, NGOpt.


*Keywords*: nevergrad, NGOpt.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Annotation: Proposed Bayesian optimization.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Keywords: Ant colony optimization, Car-sequencing problem, Pheromone trail, Scheduling.

Keywords: Bayesian prediction.


Keywords: artificial DM, interactive.
Annotation: The purpose of this study was to systematically evaluate a number of multiobjective programming concepts relative to reflection of utility, assurance of nondominated solutions and practicality for larger problems using conventional software. In the problem used, the nonlinear simulated DM utility function applied resulted in a nonextreme point solution. Very often, the preferred solution could end up being an extreme point solution, in which case the techniques relying upon LP concepts would work as well if not better than utilizing constrained objective attainments. The point is that there is no reason to expect linear or near linear utility.

https://github.com/iridia-ulb/references


Samadhi Nallaperuma, Markus Wagner, and Frank Neumann. *Parameter Prediction Based on Features of Evolved Instances for Ant Colony Optimization and the Traveling Salesperson Problem*. In Thomas Bartz-Beielstein, Jürgen Branke, Bogdan Filipiç, and Jim

https://github.com/iridia-ulb/references


Keywords: JMetal, Multi-objective metaheuristics, Open source, Optimization framework.


Keywords: cognition, Turing, search, problem solving, symbols, heuristics, list processing, computer science, artificial intelligence, science, empirical.


Keywords: Quantum Annealing.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Keywords: Pareto local search, PLS.


Annotation: Proof of Theorem 3.1 is incorrect.


Keywords: Pareto local search, PLS.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


\url{https://github.com/iridia-ulb/references}
*Annotation:* Evolutionary optimization of turbine design of the Boeing 777 GE.


*Keywords:* algorithm selection.


*Annotation:* Used in NeurIPS 2020.


[https://github.com/iridia-ulb/references](https://github.com/iridia-ulb/references)


https://github.com/iridia-ulb/references


Keywords: parameter importance.


Keywords: Kriging; Entropy; Design of experiments; Space-filling; Sphere packing; Maximin design.


Annotation: First to mention NSGA-II failure to deal with many-objectives. Mentions exponential number of nondominated solutions with respect to many objectives (but [960] already did).


Annotation: Best paper award at PPSN2018.

Keywords: algorithm configuration.

Annotation: Uses an external population.

Keywords: Evolutionary computations, Scheduling, Utility theory, Preventive maintenance, Multi-objective optimization, ranking-based, interactive.


Keywords: artificial DM, interactive.


Keywords: Ant colony Optimization, Capacitated minimum spanning tree problem.


https://github.com/iridia-ulb/references


Keywords: OMOPSO.


Keywords: anchoring bias, best-worst method, cognitive bias, MADM, multi-attribute weighting, SMART, Swing.


https://github.com/iridia-ulb/references


**Keywords:** Evidential reasoning rule, Belief rule-based inference, Maximum likelihood data analysis, Twitter, Retweet, Prediction.


**Keywords:** Combinatorial Black-box Expensive.


https://github.com/iridia-ulb/references


Annotation: unbounded archiver, AA$\Delta_1$.


Annotation: Proposed WASF-GA.


https://github.com/iridia-ulb/references


Keywords: irace.


Keywords: Cellular automata, Combinatorial optimization, Genetic algorithms, Microscopic traffic simulator, Traffic lights optimization.


Keywords: cellular automata; genetic algorithms; road traffic; traffic light programming; urban traffic congestion.


Keywords: Multi-objective optimization, density estimation, evolutionary algorithm, adaptive algorithm, fuzzy logic, spatial spread deviation.


https://github.com/iridia-ulb/references


Keywords: Quantifying Homogeneity; Empirical Analysis; Parameter Optimization; Algorithm Configuration.


Annotation: Proposed Safe Active Learning (SAL) algorithm.


https://github.com/iridia-ulb/references


Keywords: Rec-PM.


Keywords: DE-DDQN.


Keywords: Supply chain management, Multi-objective optimisation, Deep uncertainty, Scenario planning, Renewable energy.

https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Annotation: Proposed the term p-hacking.


Keywords: irace.


Keywords: Evolutionary algorithms, Evolutionary multi- and many-objective optimization, Multi-criteria decision making, Machine learning, Interactive optimization.


https://github.com/iridia-ulb/references


Keywords: ACOR.

Annotation: Proposed ACOR (ACOR).


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references
*Keywords*: Maximally dispersed weights.

*Annotation*: Proposed difference between ad hoc and non-ad hoc interactive multi-objective optimization methods.

*Keywords*: machine decision-making.

*Keywords*: machine decision making.

*Keywords*: machine decision making.

*Keywords*: Multicriteria decision analysis.

*Annotation*: Introduces computational reproducibility, empirical reproducibility and statistical reproducibility.


*Keywords*: Evolutionary algorithm,Road traffic,Smart city,Smart mobility,Traffic light,WiFi connections.

*Keywords*: Evolutionary algorithm,SUMO,Smart city,Smart mobility,Traffic simulation.

*Annotation*: Proposed differential evolution.

https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Keywords: automatic design, automatic configuration.


https://github.com/iridia-ulb/references
Keywords: StageOpt.


https://github.com/iridia-ulb/references


Annotation: Available from https://the-turing-way.netlify.app. This work was supported by The UKRI Strategic Priorities Fund under the EPSRC Grant EP/T001569/1, particularly the "Tools, Practices and Systems" theme within that grant, and by The Alan Turing Institute under the EPSRC grant EP/N510129/1.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


**Keywords:** algorithm portfolio, corpus features, topic modelling.


**Keywords:** ant colony optimization, traveling salesman problem, cunning ant, donor ant, local search.
*Keywords:* data visualization, information graphics, cognitive science.

*Keywords:* scenario-based.

*Keywords:* SafeMDP.

*Keywords:* Reinforcement Learning; Markov Decision Process; SafeML.

*Keywords:* Metaheuristics, Meta-analysis, Adaptive large neighborhood search.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


[2865] Sander van Rijn. Modular CMA-ES framework from [2866], v0.3.0. https://github.com/sjvrijn/ModEA, 2018. Available also as pypi package at https://pypi.org/project/ModEA/0.3.0/.


Keywords: automated design, automatic configuration, CMA-ES, Gaussian distribution.


https://github.com/iridia-ulb/references


   Keywords: Quadratic Unconstrained Binary Optimization, Nonlinear optimization, Pseudo-Boolean optimization, Equality constraint, Inequality constraint.


https://github.com/iridia-ulb/references

Keywords: parameter tuning, evolution strategies, algorithm configuration, performance measures.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


*Keywords: scenario-based.*
Annotation: unbounded archive.


https://github.com/iridia-ulb/reference


https://github.com/iridia-ulb/references


*Annotation:* Showed that fraction of Pareto-optimal increases with number of objectives.


*Keywords:* anytime.


*Keywords:* Cluster analysis, Min-sum-min problems, Nondifferentiable programming, Smoothing.

https://github.com/iridia-ulb/references

*Keywords*: Decision making, Evolutionary computation, Pareto optimization, Evolutionary multiobjective optimization, interactive multiobjective optimization, multiple criteria decision making, preference information, preference models.


*Keywords*: decision support system, business excellence, MCDA, quality award, self-assessment, the evidential reasoning approach.


*Keywords*: automated algorithm design; portfolio-based algorithm selection; automated algorithm configuration; SAT; stochastic local search.


*Keywords*: HARKing; PARKing.


Keywords: Bayesian Optimisation with preferences.


Annotation: epsilon-grid.


Keywords: irace.


https://github.com/iridia-ulb/references


https://github.com/iridia-ulb/references


Keywords: multi-modal, IGDX.

Keywords: performance profiles.


Annotation: linked polynomial mutation.


Keywords: IBEA.

Annotation: Proposed hypervolume measure.


Keywords: ZDT benchmark.

https://github.com/iridia-ulb/references


*Keywords:* Machine Decision Maker.