Multi-objective evolutionary algorithms for optimal scheduling
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Curriculum Vitae

Yali Wang was born in Baiyin, China. She received her BSc of Computer Science at Wuhan University, China in 1997. After that, she worked first as a software engineer and then as a configuration management officer in H3C Technologies Co., Limited, Beijing, China. In 2015, she came to the Netherlands and completed her MSc at Leiden Institute of Advanced Computer Science (LIACS), Leiden University in 2017. Right after, she worked as a PhD at the same university under the supervision of Michael Emmerich and Thomas Bäck. Her research interests include multi-objective optimization, evolutionary algorithm, scheduling optimization, prediction-based optimization, preference based multi-objective optimization and dynamic optimization.
Acronyms

AP-DI-MOEA
Automatic Preference based Diversity Indicator-based Multi-objective Evolutionary Algorithm

DF
Desirability Function

DI-MOEA
Diversity Indicator-based Multi-objective Evolutionary Algorithm

DM
Decision Maker

DRS
Dominance Resistant Solution

EA
Evolutionary Algorithm

EAF
Empirical Attainment Function

EMO
Evolutionary Multi-objective Optimization

EMOA
Evolutionary Multi-objective Optimization Algorithm

EP
Evolutionary Programming

ES
Evolution Strategy
Acronyms

FJSP
Flexible Job shop Scheduling Problem

GA
Genetic Algorithm

GD
Generational Distance

GI
Gap Indicator

GP
Genetic Programming

HV
Hypervolume

IBEA
Indicator-based Evolutionary Algorithm

IGD
Inverted Generational Distance

JSP
Job shop Scheduling Problem

MIP-EGO
Mixed integer, Parallel - Efficient Global Optimization

MOEA
Multi-objective Evolutionary Algorithm

MOFJSP
Multi-objective Flexible Job shop Scheduling Problem

MOO
Multi-Objective Optimization

MOP
Multi-objective Optimization Problem

MOVFMSO
Multi-objective Vehicle Fleet Maintenance Scheduling Optimization
Acronyms

NE
Number of Evaluations

**NSGA-II**
Non-dominated Sorting Genetic Algorithm II

**NSGA-III**
Non-dominated Sorting Genetic Algorithm III

**PF**
Pareto Front

**ROI**
Region of Interest

**RUL**
Remaining Useful Lifetime

**SMS-EMOA**
S-Metric Selection Evolutionary Multi-Objective Algorithm

**VFMSO**
Vehicle Fleet Maintenance Scheduling Optimization