

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2016-Araújo-ASE
Authors		Allyson Alex Araújo, Matheus Paixao, Italo Yeltsin, Altino Dantas, Jerffeson Souza
Title		An Architecture based on interactive optimization and machine learning applied to the next release problem
Type of publication		Journal
Name of the publication		Automated Software Engineering
Publisher		Springer
Year of publication		2016
Volume, issue, pages etc.		In press, available on line: http://dx.doi.org/10.1007/s10515-016-0200-3
Information gathering on the problem formulation		
Type of software engineering problem		Requirements
Software engineering development practice		Prescriptive process model, iterative and incremental
Number of objectives		Single-objective
Consideration of constraints		Constrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Human-based evaluation
Type of feedback	Purpose of the interactivity	Problem-oriented, search-oriented
	Role of the user	Enricher, tuner
	Task performed	Evaluation of solutions

Evaluation mechanism		Scores
Solutions shown	Number of solutions	N solutions
	Level of detail	Complete solution
	Selection criterion	Fixed, all solutions
Adjustment of the specific interaction time		Fixed, every iteration
Influence of the user's opinion	Type of feedback integration	Model-based
	Information lifetime	Short-term
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Simulated interaction; empirical investigation
User's profile	Number of participants	Between 2 and 10 participants
	User's profile information	Yes
	Position	Engineer
	Expertise	Between 5 and 10 years
Evaluation criteria		Measures; questionnaires
Case studies		Synthetic; industrial case
Empirical evidence	Additional material	Yes
	Type of material	Source code; case studies; additional statistics
Statistical analysis		Pairwise comparison; effect size measurement

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2016-Ferreira-ASC
Authors		Thiago do Nascimento Ferreira, Allysson Alex Araújo, Altino Dantas Basilio Neto, Jerffeson Teixeira de Souza
Title		Incorporating user preferences in ant colony optimization for the next release problem
Type of publication		Journal
Name of the publication		Applied Soft Computing
Publisher		Elsevier
Year of publication		2016
Volume, issue, pages etc.		In press, available on line, http://dx.doi.org/10.1016/j.asoc.2016.06.027
Information gathering on the problem formulation		
Type of software engineering problem		Requirements
Software engineering development practice		Prescriptive process model, iterative and incremental
Number of objectives		Single-objective
Consideration of constraints		Constrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, swarm intelligence
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Interactive reoptimisation
Type of feedback	Purpose of the interactivity	Problem-oriented; search-oriented
	Role of the user	Adjuster; tuner
	Task performed	Evaluation of solutions

Evaluation mechanism		Reward/penalisation
Solutions shown	Number of solutions	One solution
	Level of detail	Complete solution
	Selection criterion	Fixed, best solution
Adjustment of the specific interaction time		Fixed, every N iterations
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Short-term
	Information validity	Flexible
Information gathering on the experimental framework		
Type of study		Simulated interaction; empirical investigation
User's profile	Number of participants	Between 11 and 20 participants
	User's profile information	Partially
	Position	Engineer (Industry)
	Expertise	Less than 5 years; Between 5 and 10 years; Between 11 and 20 years;
Evaluation criteria		Measures; solutions
Case studies		Synthetic; controlled environment
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		No

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2016-Lin-FSE
Authors		Yun Lin, Xin Peng, Yuanfang Cai, Danny Dig, Diwen Zheng, Weyan Zhao
Title		Interactive and Guided Architectural Refactoring with Search-Based Recommendation
Type of publication		Conference paper
Name of the publication		Foundations of Software Engineering (FSE) '16, November 13-18, 2016
Publisher		ACM
Year of publication		2016
Volume, issue, pages etc.		pp. 535-546
Information gathering on the problem formulation		
Type of software engineering problem		Distribution and maintenance
Software engineering development practice		None mentioned
Number of objectives		Multi-objective
Consideration of constraints		Not specified
Information gathering on the search technique		
Type of algorithm		Metaheuristic, Single-Solution Based; Metaheuristic, Population-Based, Evolutionary Computation
Single/multi-objective approach		Single objective
Information gathering on the interactive approach		
Type of interactive algorithm		Preference-guide interactivity, Interactive reoptimisation
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Enricher
	Task performed	Modification of solutions
Evaluation mechanism		Reward/penalisation

Solutions shown	Number of solutions	One solution
	Level of detail	Complete
	Selection criterion	Fixed, best solution(s)
Adjustment of the specific interaction time		Fixed > Between two runs
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Short-term
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Empirical investigation, sample execution
User's profile	Number of participants	Between 11 and 20 participants
	User's profile information	Partially
	Position	Postgraduate students, undergraduate students
	Expertise	None mentioned
Evaluation criteria		Solutions
Case studies		Controlled environment, industrial case
Empirical evidence	Additional material	Yes
	Type of material	Source code, case studies, transcripts of the interactive session (video)
Statistical analysis		Pairwise comparison

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2016-Marculescu-IST
Authors		Bogdan Marculescu, Simon Poulding, Robert Feldt, Kai Petersen, Richard Torkar
Title		Tester interactivity makes a difference in search-based software testing: a controlled experiment
Type of publication		Journal
Name of the publication		Information and Software Technology
Publisher		Elsevier
Year of publication		2016
Volume, issue, pages etc.		vol. 78, pp. 66-82
Information gathering on the problem formulation		
Type of software engineering problem		Testing and verification
Software engineering development practice		Not specified
Number of objectives		Many-objective
Consideration of constraints		Not specified
Information gathering on the search technique		
Type of algorithm		Metaheuristics, population-based, evolutionary computation
Single/multi-objective approach		Single objective
Information gathering on the interactive approach		
Type of interactive algorithm		Interactive reoptimisation
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Adjuster
	Task performed	Evaluation of solutions
Evaluation mechanism		Weights

Solutions shown	Number of solutions	All solutions
	Level of detail	Complete solution; partial solution
	Selection criterion	Fixed, all solutions
Adjustment of the specific interaction time		Fixed, every N iterations
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based
	Information validity	Flexible
Information gathering on the experimental framework		
Type of study		Empirical investigation
User's profile	Number of participants	More than 21 participants
	User's profile information	Partially
	Position	Post-graduate students
	Expertise	Less than 5 years
Evaluation criteria		Measures; questionnaires
Case studies		Controlled environment
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		Pairwise comparison; effect size measurement

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2016-Mkaouer-SSBSE
Authors		Mohammed Mkaouer
Title		Interactive Code Smells Detection: An Initial Investigation
Type of publication		Conference paper
Name of the publication		Symposium on Search-Based Software Engineering (SSBSE) 2016
Publisher		Springer
Year of publication		2016
Volume, issue, pages etc.		LNCS 9962, pp. 281-287.
Information gathering on the problem formulation		
Type of software engineering problem		Distribution and maintenance
Software engineering development practice		None mentioned
Number of objectives		None mentioned
Consideration of constraints		None mentioned
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Preference-based interactivity
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Adjuster
	Task performed	Evaluation of solutions
Evaluation mechanism		Reward/Penalisation

Solutions shown	Number of solutions	All solutions
	Level of detail	Partial solution
	Selection criterion	Fixed > Specific solution(s)
Adjustment of the specific interaction time		Fixed > Between two runs
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Empirical investigation
User's profile	Number of participants	Between 2 and 10 participants
	User's profile information	Partial
	Position	Postgraduate students
	Expertise	None mentioned
Evaluation criteria		Solutions
Case studies		Controlled environment
Empirical evidence	Additional material	No
	Type of material	None mentioned
Statistical analysis		None mentioned

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2016-Troiano-SP
Authors		Luigi Troiano, Cosimo Birtolo, Roberto Armenise
Title		A validation study regarding a generative approach in choosing appropriate colors for impaired users
Type of publication		Journal (Open Access)
Name of the publication		SpringerPlus
Publisher		Springer Open
Year of publication		2016
Volume, issue, pages etc.		vol. 5:1090, pp. 1-26
Information gathering on the problem formulation		
Type of software engineering problem		Analysis and design
Software engineering development practice		Not specified
Number of objectives		Multi-objective problem
Consideration of constraints		Not specified
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Human-based evaluation
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Enricher
	Task performed	Evaluation of solutions

Evaluation mechanism		Scores
Solutions shown	Number of solutions	N solutions
	Level of detail	Complete solution
	Selection criterion	Not specified
Adjustment of the specific interaction time		Fixed, every N iterations
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Empirical investigation
User's profile	Number of participants	More than 21 participants
	User's profile information	Partially
	Position	Other (see Chris's comment)
	Expertise	Not specified
Evaluation criteria		Measures; questionnaires
Case studies		Industrial case
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		Parwise comparison; multiple comparison

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2015-Dantas-SSBSE
Authors		Altino Dantas, Italo Yeltsin, Allyson Alex Araújo, Jerffeson Souza
Title		Interactive Software Release Planning with Preferences Base
Type of publication		Conference
Name of the publication		Proceedings of the 7th International Symposium on Search Based Software Engineering (SSBSE'15)
Publisher		Springer
Year of publication		2015
Volume, issue, pages etc.		LNCS 9275, pp. 341-346
Information gathering on the problem formulation		
Type of software engineering problem		Requirements
Software engineering development practice		Prescriptive process model, incremental
Number of objectives		Single-objective
Consideration of constraints		Constrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Interactive reoptimisation
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Enricher
	Task performed	Evaluation of solutions

Evaluation mechanism		Reward/penalisation
Solutions shown	Number of solutions	One solution
	Level of detail	Complete solution
	Selection criterion	Fixed, best solution(s)
Adjustment of the specific interaction time		Fixed, between two runs
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Short-term
	Information validity	Flexible
Information gathering on the experimental framework		
Type of study		Simulated interaction
User's profile	Number of participants	-
	User's profile information	-
	Position	-
	Expertise	-
Evaluation criteria		Measures
Case studies		Controlled environment
Empirical evidence	Additional material	Yes
	Type of material	Case studies
Statistical analysis		Pairwise comparison

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2015-Marculescu-ASC
Authors		Bogdan Marculescu, Robert Feldt, Richard Torkar, Simon Poulding
Title		An initial industrial evaluation of interactive search-based testing for embedded software
Type of publication		Journal
Name of the publication		Applied Soft Computing
Publisher		Elsevier
Year of publication		2015
Volume, issue, pages etc.		vol. 29, pp. 26-39
Information gathering on the problem formulation		
Type of software engineering problem		Testing and verification
Software engineering development practice		Not specified
Number of objectives		Many-objective
Consideration of constraints		Not specified
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Interactive reoptimisation
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Adjuster
	Task performed	Evaluation of solutions

Evaluation mechanism		Weights
Solutions shown	Number of solutions	All solutions
	Level of detail	Partial solution; complete solution
	Selection criterion	All solutions
Adjustment of the specific interaction time		Fixed, every N iterations
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based
	Information validity	Flexible
Information gathering on the experimental framework		
Type of study		Empirical investigation; simulated interaction
User's profile	Number of participants	Between 2 and 10 participants
	User's profile information	Yes
	Position	Engineer (industry) (5)
	Expertise	Less than 5 years (1); between 5 and 10 years (1); between 11 and 20 years (3)
Evaluation criteria		Measures; questionnaires
Case studies		Industrial case
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		Pairwise comparison

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2014-Amal-SSBSE
Authors		Boukhdrir Amal, Marouane Kessentini, Slim Bechikh, Josselin Dea, Lamjed Ben Said
Title		On the Use of Machine Learning and Search-Based Software Engineering for Ill-Defined Fitness Function: A Case Study on Software Refactoring
Type of publication		Conference
Name of the publication		Proceedings of the 6th International Symposium on Search-based Software Engineering (SSBSE'14)
Publisher		Springer
Year of publication		2014
Volume, issue, pages etc.		LNCS 8636, pp. 31-45
Information gathering on the problem formulation		
Type of software engineering problem		Distribution and maintenance
Software engineering development practice		Not specified
Number of objectives		Not specified
Consideration of constraints		Constrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based metaheuristic, evolutionary computation
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Human-based evaluation
Type of feedback	Purpose of the interactivity	Search-oriented
	Role of the user	Guide
	Task performed	Evaluation of solutions

Evaluation mechanism		Fitness value
Solutions shown	Number of solutions	N solutions
	Level of detail	Complete solution
	Selection criterion	Fixed, not specified
Adjustment of the specific interaction time		Fixed, every iteration
Influence of the user's opinion	Type of feedback integration	Model-based
	Information lifetime	Short-term
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Empirical investigation
User's profile	Number of participants	Between 11 and 20 participants
	User's profile information	Yes
	Position	Undergraduate students, postgraduate students, PhD academia staff, engineer
	Expertise	Less than 5 years, between 5 and 10 years, between 11 and 20 years
Evaluation criteria		Measures
Case studies		Controlled environment
Empirical evidence	Additional material	No
	Type of material	Not applicable
Statistical analysis		Pairwise comparison

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2014-EIYamany-SPLC
Authors		Ahmed Eid El Yamany, Mohamed Shaheen, Abdel Salam Sayyad
Title		OPTI-SELECT: An Interactive Tool for User-in-the-Loop Feature Selection in Software Product Lines
Type of publication		Conference
Name of the publication		Proceedings of the 18th International Software Product Line Conference (SPLC'14): Companion Volume for Workshops, Demonstrations and Tools -Volume 2
Publisher		ACM
Year of publication		2014
Volume, issue, pages etc.		vol.2, pp. 126-129
Information gathering on the problem formulation		
Type of software engineering problem		Analysis and design
Software engineering development practice		Not specified
Number of objectives		Many-objective
Consideration of constraints		Unconstrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Many-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Preference-based interactivity; interactive reoptimisation
Type of feedback	Purpose of the interactivity	Problem-oriented; search oriented
	Role of the user	Enricher; guide
	Task performed	Selection of solutions

Evaluation mechanism		-
Solutions shown	Number of solutions	All solutions
	Level of detail	Complete solutions
	Selection criterion	Fixed, all solutions
Adjustment of the specific interaction time		Fixed, between 2 runs
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based
	Information validity	Flexible
Information gathering on the experimental framework		
Type of study		Theoretical proposal
User's profile	Number of participants	-
	User's profile information	-
	Position	-
	Expertise	-
Evaluation criteria		-
Case studies		-
Empirical evidence	Additional material	-
	Type of material	-
Statistical analysis		-

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2014-Mkaouer-ASEC
Authors		Wiem Mkaouer, Marouane Kessentini, Slim Bechikh, Kalyanmoy Deb, Mel Ó Cinnéide
Title		Recommendation Systems for Software Refactoring Using Innovization and Interactive Dynamic Optimization
Type of publication		Conference
Name of the publication		Proceedings of the 29th ACM/IEEE International Conference on Automated Software Engineering
Publisher		ACM/IEEE
Year of publication		2014
Volume, issue, pages etc.		pp. 331-336
Information gathering on the problem formulation		
Type of software engineering problem		Distribution and maintenance
Software engineering development practice		Not specified
Number of objectives		Multi-objective
Consideration of constraints		Unconstrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computing
Single/multi-objective approach		Multi-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Preference-based interactivity
Type of feedback	Purpose of the interactivity	Search-oriented
	Role of the user	Guide
	Task performed	Evaluation of solutions; modification of solutions

Evaluation mechanism		Reward/penalisation
Solutions shown	Number of solutions	All solutions
	Level of detail	Complete solutions
	Selection criterion	Fixed, all solutions
Adjustment of the specific interaction time		Fixed, between two runs
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Empirical investigation
User's profile	Number of participants	Between 11 and 20 participants
	User's profile information	Yes
	Position	Engineers; postgraduate students
	Expertise	Less than 5 years; between 5 and 10 years; between 11 and 20 years
Evaluation criteria		Measures; solutions; questionnaires
Case studies		Controlled environment; industrial case
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		Pairwise comparison

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2014-Simons-SI
Authors		Christopher L. Simons, Jim Smith, Paul White
Title		Interactive ant colony optimization (iACO) for early lifecycle software design
Type of publication		Journal
Name of the publication		Swarm Intelligence
Publisher		Springer
Year of publication		2014
Volume, issue, pages etc.		vol. 8, pp. 139-157
Information gathering on the problem formulation		
Type of software engineering problem		Analysis and design
Software engineering development practice		Not specified
Number of objectives		Multi-objective
Consideration of constraints		Constrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, swarm intelligence
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Human-based evaluation
Type of feedback	Purpose of the interactivity	Problem-oriented; search-oriented
	Role of the user	Adjuster; assistant
	Task performed	Evaluation of solutions; selection of solutions; modification of solutions

Evaluation mechanism		Scores
Solutions shown	Number of solutions	One solution
	Level of detail	Complete solution
	Selection criterion	Fixed, specific solution
Adjustment of the specific interaction time		Dynamic, adaptive
Influence of the user's opinion	Type of feedback integration	Model-based
	Information lifetime	Short-term
	Information validity	Flexible; unrestricted
Information gathering on the experimental framework		
Type of study		Empirical evaluation
User's profile	Number of participants	Between 11 and 20 participants
	User's profile information	Partially
	Position	Other (software developer + academia)
	Expertise	Not specified
Evaluation criteria		Measures; questionnaires
Case studies		Controlled environment
Empirical evidence	Additional material	Unreachable
	Type of material	Unreachable
Statistical analysis		Pairwise comparison

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2013-Ghannem-SSBSE
Authors		Adane Ghannem, Ghizlane El Boussaidi, Marouane Kessentini
Title		Model Refactoring Using Interactive Genetic Algorithm
Type of publication		Conference
Name of the publication		Proceedings of the 5th International Symposium on Search-based Software Engineering (SSBSE'13)
Publisher		Springer
Year of publication		2013
Volume, issue, pages etc.		LNCS 8084, pp. 96-110
Information gathering on the problem formulation		
Type of software engineering problem		Distribution and maintenance
Software engineering development practice		Specialised process model, MDE
Number of objectives		Many-objective
Consideration of constraints		Unconstrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Human-based evaluation
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Enricher
	Task performed	Evaluation of solutions

Evaluation mechanism		Scores
Solutions shown	Number of solutions	N solutions
	Level of detail	Complete solution
	Selection criterion	Fixed, best solution(s)
Adjustment of the specific interaction time		Fixed, every N iterations
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Empirical investigation
User's profile	Number of participants	Between 2 and 10 participants
	User's profile information	Partially
	Position	Postgraduate students
	Expertise	Not specified
Evaluation criteria		Measures
Case studies		Controlled environment
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		No

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2013-Marculescu-ICMLA
Authors		Bogdan Marculescu, Robert Feldt, Richard Torkar
Title		Objective Re-Weighting to Guide an Interactive Search Based Software Testing System
Type of publication		Conference
Name of the publication		Proceedings of the 12th International Conference on Machine Learning and Applications (ICMLA'13)
Publisher		IEEE
Year of publication		2013
Volume, issue, pages etc.		vol. 2, pp. 102-107
Information gathering on the problem formulation		
Type of software engineering problem		Testing and verification
Software engineering development practice		Not specified
Number of objectives		Multi-objective
Consideration of constraints		Unconstrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Interactive reoptimisation
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Adjuster
	Task performed	Evaluation of solutions

Evaluation mechanism		Weights
Solutions shown	Number of solutions	N solutions
	Level of detail	Complete solution
	Selection criterion	Fixed, best solutions(s)
Adjustment of the specific interaction time		Fixed, every N iterations
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based
	Information validity	Flexible
Information gathering on the experimental framework		
Type of study		Simulation interaction
User's profile	Number of participants	-
	User's profile information	-
	Position	-
	Expertise	-
Evaluation criteria		Measures
Case studies		Industrial case
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		No

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2013-Tonella-IST
Authors		Paolo Tonella, Angelo Susi, Francis Palma
Title		Interactive requirements prioritization using a genetic algorithm
Type of publication		Journal
Name of the publication		Information and Software Technology
Publisher		Elsevier
Year of publication		2013
Volume, issue, pages etc.		vol. 55(1), pp. 173-187
Information gathering on the problem formulation		
Type of software engineering problem		Requirements
Software engineering development practice		Not specified
Number of objectives		Single-objective
Consideration of constraints		Constrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computing
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Interactive reoptimisation; human-based evaluation
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Enricher
	Task performed	Comparison of solutions

Evaluation mechanism		Rankings
Solutions shown	Number of solutions	Pair of solutions
	Level of detail	Complete solution
	Selection criterion	Fixed, specific solution(s)
Adjustment of the specific interaction time		Dynamic, adaptive
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Simulated interaction
User's profile	Number of participants	-
	User's profile information	-
	Position	-
	Expertise	-
Evaluation criteria		Measures
Case studies		Industrial case
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		Multiple comparison

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2013-Vathsavayi-EAS
Authors		Sriharsha Vathsavayi, Hadaytullah, Kai Koskimies
Title		Interleaving human and search-based software architecture design
Type of publication		Journal
Name of the publication		Proceedings of the Estonian Academy of Sciences
Publisher		Estonian Academy Publishers
Year of publication		2013
Volume, issue, pages etc.		vol. 62, no. 1, pp. 16-26
Information gathering on the problem formulation		
Type of software engineering problem		Analysis and design
Software engineering development practice		Not specified
Number of objectives		Many-objective
Consideration of constraints		Not specified
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Interactive reoptimisation; human-guided search
Type of feedback	Purpose of the interactivity	Search-oriented; problem-oriented
	Role of the user	Tuner; adjuster
	Task performed	Modification of solutions; evaluation of solutions

Evaluation mechanism		Weights
Solutions shown	Number of solutions	One solution
	Level of detail	Complete solution
	Selection criterion	Fixed, best solution
Adjustment of the specific interaction time		Fixed, between two runs
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Short-term
	Information validity	Flexible; permanent
Information gathering on the experimental framework		
Type of study		Sample execution; empirical investigation
User's profile	Number of participants	Between 2 and 10 participants
	User's profile information	Partially
	Position	PhD academia staff; postgraduate students
	Expertise	Not specified
Evaluation criteria		Solutions
Case studies		Synthetic
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		No

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2013-Wang-ICSE
Authors		Jinshui Wang, Xin Peng, Zhenchang Xing, Wenyun Zhao
Title		Improving feature location practice with multi-faceted interactive exploration
Type of publication		Conference
Name of the publication		Proceedings of the 2013 International Conference on Software Engineering (ICSE'13)
Publisher		IEEE
Year of publication		2013
Volume, issue, pages etc.		pp. 762-771
Information gathering on the problem formulation		
Type of software engineering problem		Distribution and maintenance
Software engineering development practice		Not specified
Number of objectives		Not specified
Consideration of constraints		Not specified
Information gathering on the search technique		
Type of algorithm		Machine learning, unsupervised
Single/multi-objective approach		Not applicable
Information gathering on the interactive approach		
Type of interactive algorithm		Preference-based interactivity
Type of feedback	Purpose of the interactivity	Search-oriented
	Role of the user	Tuner
	Task performed	Selection (of terms, not solutions)

Evaluation mechanism		Ranking
Solutions shown	Number of solutions	All solutions
	Level of detail	Complete solution
	Selection criterion	Fixed, all solutions
Adjustment of the specific interaction time		Fixed, between two runs
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Short-term
	Information validity	Unrestricted
Information gathering on the experimental framework		
Type of study		Empirical investigation
User's profile	Number of participants	Between 11 and 20 participants
	User's profile information	Partial
	Position	Undergraduate students
	Expertise	-
Evaluation criteria		Measures; questionnaires
Case studies		Controlled environment
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		Pairwise comparison

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2012-Bavota-SSBSE
Authors		Grabiele Bavota, Filomena Carnevale, Andrea De Lucia, Massimiliano Di Penta, Rocco Oliveto
Title		Putting the Developer in-the-Loop: An Interactive GA for Software Re-modularization
Type of publication		Conference
Name of the publication		Proceedings of the 4th International Symposium on Search-based Software Engineering (SSBSE'12)
Publisher		Springer
Year of publication		2012
Volume, issue, pages etc.		LNCS 7515, pp. 75-89
Information gathering on the problem formulation		
Type of software engineering problem		Distribution and maintenance
Software engineering development practice		Not specified
Number of objectives		Single-objective; many-objective
Consideration of constraints		Unconstrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Single-objective; multi-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Preference-based interactivity
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Enricher
	Task performed	Comparison of solutions; modification of solutions

Evaluation mechanism		Reward/penalisation
Solutions shown	Number of solutions	One solution
	Level of detail	Partial solution
	Selection criterion	Fixed, best solution(s)
Adjustment of the specific interaction time		Fixed, every N iterations
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Short-term
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Simulated interaction
User's profile	Number of participants	-
	User's profile information	-
	Position	-
	Expertise	-
Evaluation criteria		Measures
Case studies		Industrial case; controlled environment
Empirical evidence	Additional material	Yes (but unreachable)
	Type of material	-
Statistical analysis		Pairwise comparison; effect size measurement

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2012-Simons-SMC
Authors		Christopher L. Simons, Ian C. Parmee
Title		Elegant Object-Oriented Software Design via Interactive, Evolutionary Computation
Type of publication		Journal
Name of the publication		IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews
Publisher		IEEE
Year of publication		2012
Volume, issue, pages etc.		vol. 42, no. 6, November 2012, pp. 1797-1805
Information gathering on the problem formulation		
Type of software engineering problem		Analysis and design
Software engineering development practice		Not specified
Number of objectives		Multi-objective
Consideration of constraints		Constrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Multi-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Interactive reoptimisation
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Adjuster
	Task performed	Evaluation of solutions

Evaluation mechanism		Scores
Solutions shown	Number of solutions	One solution
	Level of detail	Complete solution
	Selection criterion	Fixed, specific solution(s)
Adjustment of the specific interaction time		Fixed, every iteration
Influence of the user's opinion	Type of feedback integration	Model-based
	Information lifetime	Short-term
	Information validity	Flexible
Information gathering on the experimental framework		
Type of study		Empirical investigation
User's profile	Number of participants	Between 2 and 10
	User's profile information	Yes
	Position	PhD academia (5 lecturers+1 researcher); undergraduate student (1)
	Expertise	Less than 5 years (1); between 5 and 10 years (1); between 11 and 20 years (1); more than 21 years (4)
Evaluation criteria		Measures; questionnaires
Case studies		Controlled environment
Empirical evidence	Additional material	Yes
	Type of material	Case studies; experimental results in raw format; other (participants' comments, graphics)
Statistical analysis		Pairwise comparison; multiple comparison

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2011-Palma-ESEC
Authors		Francis Palma, Angelo Susi, Paolo Tonella
Title		Using an SMT Solver for Interactive Requirements Prioritization
Type of publication		Conference
Name of the publication		Proceedings of the 19th ACM SIGSOFT Symposium and the 13th European Conference on Foundations of
Publisher		ACM
Year of publication		2011
Volume, issue, pages etc.		pp. 48-58
Information gathering on the problem formulation		
Type of software engineering problem		Requirements
Software engineering development practice		Not specified
Number of objectives		Single-objective
Consideration of constraints		Constrained
Information gathering on the search technique		
Type of algorithm		Exact
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Interactive reoptimisation
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Enricher
	Task performed	Comparison of solutions

Evaluation mechanism		Reward/penalisation
Solutions shown	Number of solutions	Pair of solutions
	Level of detail	Partial solution
	Selection criterion	Fixed, specific solutions
Adjustment of the specific interaction time		Fixed, every iteration
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Short-term
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Simulated interaction
User's profile	Number of participants	-
	User's profile information	-
	Position	-
	Expertise	-
Evaluation criteria		Measures
Case studies		Industrial case
Empirical evidence	Additional material	Yes
	Type of material	Source code; results in raw format; case studies; other (graphics)
Statistical analysis		Multiple comparison

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2010-Simons-TSE
Authors		Christopher L. Simons, Ian C. Parmee, Rhys Qwynllyw
Title		Interactive, Evolutionary Search in Upstream Object-Oriented Class Design
Type of publication		Journal
Name of the publication		IEEE Transactions on Software Engineering
Publisher		IEEE
Year of publication		2010
Volume, issue, pages etc.		vol. 36, no. 6, November/December 2010, pp. 798-816
Information gathering on the problem formulation		
Type of software engineering problem		Analysis and design
Software engineering development practice		Not specified
Number of objectives		Multi-objective
Consideration of constraints		Constrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Multi-objective; single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Preference-based interactivity
Type of feedback	Purpose of the interactivity	Search-oriented
	Role of the user	Guide
	Task performed	Selection of solutions

Evaluation mechanism		Scores
Solutions shown	Number of solutions	N solutions
	Level of detail	Complete solution
	Selection criterion	Fixed, specific solutions
Adjustment of the specific interaction time		Fixed, between two runs
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Short-term
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Sample execution
User's profile	Number of participants	-
	User's profile information	-
	Position	-
	Expertise	-
Evaluation criteria		Measures; solutions
Case studies		Controlled environment
Empirical evidence	Additional material	Yes
	Type of material	Case studies; transcript of the interactive session (log)
Statistical analysis		No

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2009-Axelsson-SEKE
Authors		Stefan Axelsson, Dejan Baca, Robert Feldt, Darius Sidlauskas, Denis Kacan
Title		Detecting Defects with an Interactive Code Review Tool Based on Visualisation and Machine Learning
Type of publication		Conference
Name of the publication		Proceedings of the 21st International Conference on Software Engineering & Knowledge Engineering
Publisher		Knowledge Systems Institute
Year of publication		2009
Volume, issue, pages etc.		pp. 412-417
Information gathering on the problem formulation		
Type of software engineering problem		Code implementation
Software engineering development practice		Not specified
Number of objectives		Not specified
Consideration of constraints		Not specified
Information gathering on the search technique		
Type of algorithm		Machine learning, supervised
Single/multi-objective approach		Not applicable
Information gathering on the interactive approach		
Type of interactive algorithm		Preference-based interactivity
Type of feedback	Purpose of the interactivity	Search-oriented
	Role of the user	Assistant
	Task performed	Selection of solutions

Evaluation mechanism		Reward/penalisation
Solutions shown	Number of solutions	Not specified
	Level of detail	Partial solution
	Selection criterion	Free
Adjustment of the specific interaction time		Fixed, between two runs
Influence of the user's opinion	Type of feedback integration	Model-based
	Information lifetime	Short-term
	Information validity	Unrestricted
Information gathering on the experimental framework		
Type of study		Empirical investigation
User's profile	Number of participants	Between 2 and 10 participants
	User's profile information	No
	Position	N/A
	Expertise	-
Evaluation criteria		Measures; solutions; questionnaires
Case studies		Controlled environment
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		No

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2009-Birtolo-NaBIC
Authors		Cosimo Birtolo, Paolo Pagano, Luigi Troiano
Title		Evolving Colours in User Interfaces by Interactive Genetic Algorithm
Type of publication		Conference
Name of the publication		Proceedings of the 2009 World Congress on Nature and Biologically Inspired Computing (NaBIC)
Publisher		IEEE
Year of publication		2009
Volume, issue, pages etc.		pp. 349-355
Information gathering on the problem formulation		
Type of software engineering problem		Analysis and design
Software engineering development practice		Not specified
Number of objectives		Multi-objective
Consideration of constraints		Unconstrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Human-based evaluation
Type of feedback	Purpose of the interactivity	Search-oriented
	Role of the user	Guide
	Task performed	Evaluation of solutions

Evaluation mechanism		Scores
Solutions shown	Number of solutions	N solutions (clusters)
	Level of detail	Complete solution
	Selection criterion	Fixed, specific solution(s)
Adjustment of the specific interaction time		Fixed, every N iterations
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based
	Information validity	Flexible
Information gathering on the experimental framework		
Type of study		Simulated interaction
User's profile	Number of participants	-
	User's profile information	-
	Position	-
	Expertise	-
Evaluation criteria		Measures
Case studies		Not specified
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		Pairwise comparison; multiple comparison

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2009-Simons-SMCC
Authors		Christopher L. Simons, Ian C. Parmee
Title		An Empirical Investigation of Search-Based Computational Support for Conceptual Software Engineering Design
Type of publication		Conference
Name of the publication		Proceedings of the 2009 IEEE International Conference on Systems, Man and Cybernetics (SMC)
Publisher		IEEE
Year of publication		2009
Volume, issue, pages etc.		pp. 2503-2508
Information gathering on the problem formulation		
Type of software engineering problem		Analysis and design
Software engineering development practice		Not specified
Number of objectives		Multi-objective
Consideration of constraints		Constrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Multi-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Preference-based interactivity
Type of feedback	Purpose of the interactivity	Search-oriented
	Role of the user	Guide
	Task performed	Selection of solutions

Evaluation mechanism		Scores; reward/penalisation
Solutions shown	Number of solutions	N solutions
	Level of detail	Complete solution
	Selection criterion	Free
Adjustment of the specific interaction time		Fixed, between two runs
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Empirical investigation
User's profile	Number of participants	Between 2 and 10 participants
	User's profile information	Yes
	Position	Engineer
	Expertise	Between 5 and 10 years (1); between 11 and 20 years (1)
Evaluation criteria		Measures
Case studies		Industrial case
Empirical evidence	Additional material	Yes
	Type of material	Case studies; transcript of the interactive session
Statistical analysis		No

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		2007-Quiroz-CEC
Authors		Juan C. Quiroz, Sushil J. Louis, Anil Shankar, Sergiu M. Dascalu
Title		Interactive Genetic Algorithms for User Interface Design
Type of publication		Conference
Name of the publication		Proceedings of the 2007 IEEE Congress on Evolutionary Computation (CEC)
Publisher		IEEE
Year of publication		2007
Volume, issue, pages etc.		pp. 1366-1373
Information gathering on the problem formulation		
Type of software engineering problem		Analysis and design
Software engineering development practice		Not specified
Number of objectives		Multi-objective
Consideration of constraints		Not specified
Information gathering on the search technique		
Type of algorithm		Metaheuristics, population-based, evolutionary computation
Single/multi-objective approach		Single-objective
Information gathering on the interactive approach		
Type of interactive algorithm		Preference-based interactivity
Type of feedback	Purpose of the interactivity	Problem-oriented
	Role of the user	Adjuster
	Task performed	Selection of solutions

Evaluation mechanism		Reward/penalisation
Solutions shown	Number of solutions	N Solutions
	Level of detail	Complete solution
	Selection criterion	Fixed, not specified
Adjustment of the specific interaction time		Fixed, every N iterations
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based
	Information validity	Permanent
Information gathering on the experimental framework		
Type of study		Empirical investigation
User's profile	Number of participants	Between 2 and 10 participants
	User's profile information	No
	Position	-
	Expertise	-
Evaluation criteria		Measures, solutions
Case studies		Controlled environment
Empirical evidence	Additional material	No
	Type of material	-
Statistical analysis		No

Field		Final Decision
Information gathering on the manuscript		
Acronym (Year-Author-Pub)		1999-Monmarche-SMCC
Authors		N. Monmarché, G. Nocent, M. Slimane, G. Venturini, P. Santini
Title		Imagine: a tool for generating HTML style sheets with an interactive genetic algorithm based on genes frequencies
Type of publication		Conference
Name of the publication		Proceedings IEEE International Conference on Systems, Man, and Cybernetics (SMC)
Publisher		IEEE
Year of publication		1999
Volume, issue, pages etc.		vol. 3, pp. 640-645
Information gathering on the problem formulation		
Type of software engineering problem		Analysis and design
Software engineering development practice		Not specified
Number of objectives		Single-objective
Consideration of constraints		Unconstrained
Information gathering on the search technique		
Type of algorithm		Metaheuristic, population-based, evolutionary computation
Single/multi-objective approach		Not specified
Information gathering on the interactive approach		
Type of interactive algorithm		Preference-based interactivity, human-guided search
Type of feedback	Purpose of the interactivity	Search-oriented
	Role of the user	Assistant, tuner
	Task performed	Selection, modification

Evaluation mechanism		Reward/penalisation
Solutions shown	Number of solutions	N solutions
	Level of detail	Complete solutions
	Selection criterion	Fixed, all solutions
Adjustment of the specific interaction time		Fixed, every iteration
Influence of the user's opinion	Type of feedback integration	Model-free
	Information lifetime	Step-based, short-term
	Information validity	Flexible, unrestricted
Information gathering on the experimental framework		
Type of study		Sample execution
User's profile	Number of participants	No
	User's profile information	No
	Position	No
	Expertise	No
Evaluation criteria		Solutions
Case studies		Synthetic
Empirical evidence	Additional material	Unreachable
	Type of material	No
Statistical analysis		No