



NAME	YEAR	DB
A Game Plan to Build Optimized Regression Testing in Agile Methodologies Using TestPrioritization	2021	IEEE
Test Case Prioritization for Continuous Regression Testing: An Industrial Case Study	2013	IEEE
A regression test selection technique by optimizing user stories in an Agile environment	2014	IEEE
A methodology for regression testing reduction and prioritization of agile releases	2015	IEEE
Effect of Time Window on the Performance of Continuous Regression Testing	2016	IEEE
Neural Network Classification for Improving Continuous Regression Testing	2020	IEEE
Regression Test Selection Tool for Python in Continuous Integration Process	2021	IEEE
Understanding and Improving Regression Test Selection in Continuous Integration	2019	IEEE
A Framework for Continuous Regression and Integration Testing in IoT Systems Based on Deep Learning and Search-Based Techniques	2020	IEEE
A Study of Regression Test Selection in Continuous Integration Environments	2018	IEEE
Learning-to-Rank vs Ranking-to-Learn: Strategies for Regression Testing in ContinuousIntegration	2020	IEEE
Cost-Effective Regression Testing Using Bloom Filters in Continuous Integration Development Environments	2017	IEEE
Machine Learning Regression Techniques for Test Case Prioritization in ContinuousIntegration Environment	2022	IEEE
Build System Aware Multi-language Regression Test Selection in Continuous Integration	2022	IEEE
An Empirical Study of Regression Testing for Android Apps in Continuous Integration Environment	2023	IEEE

Test case reduction and SWOA optimization for distributed agile software development using regression testing	2024	SCOPUS
Towards a Shift in Regression Test Suite Development Approach in Agile	2022	SCOPUS
Regression tests provenance data in the continuous software engineering context	2017	SCOPUS
Cluster-based test cases prioritization and selection technique for agile regression testing	2017	SCOPUS
Estimation of regression test effort in agile projects	2016	SCOPUS
Empirically evaluating readily available information for regression test optimization in continuous integration	2021	ACM
Improving regression testing in continuous integration development environments (keynote)	2018	ACM
Techniques for improving regression testing in continuous integration development environments	2014	ACM
Automated regression testing of BPMN 2.0 processes: a capture and replay framework for continuous delivery	2016	ACM
Measuring the cost of regression testing in practice: a study of Java projects using continuous integration	2017	ACM
Agile regression testing using record & playback	2003	ACM
Influences on regression testing strategies in agile software development environments	2014	ACM
Enhanced regression testing technique for agile software development and continuous integration strategies	2020	ACM
Learning-based prioritization of test cases in continuous integration of highly-configurable software.	2020	GS
Xcs as a reinforcement learning approach to automatic test case prioritization.	2020	GS
Hybrid Framework To Exclude Similar and Faulty Test Cases In Regression Testing	2024	GS
Regression test selection in test-driven development	2024	GS

Embracing Unification: A Comprehensive Approach to Modern Test Case Prioritization.	2024	GS
Improved novel bat algorithm for test case prioritization and minimization	2022	GS
A regression test case generation method for avionics software	2022	GS
Regression Testing Prioritization Technique Based on Historical Execution Information	2022	GS
Reinforcement Learning Reward Function for Test Case Prioritization in Continuous Integration	2022	GS

NAME	YEAR	DB	Focus	Type of Algo
Test Case Prioritization for Continuous Regression Testing: An Industrial Case Study	2013	IEEE	RTP	Huristics
A regression test selection technique by optimizing user stories in an Agile environment	2014	IEEE	RTS	Adhoc
A methodology for regression testing reduction and prioritization of agile releases	2015	IEEE	RTM,RTP	Adhoc
Effect of Time Window on the Performance of Continuous Regression Testing	2016	IEEE	RTP	Huristics
Neural Network Classification for Improving Continuous Regression Testing	2020	IEEE	RTP	NN-ML
Regression Test Selection Tool for Python in Continuous Integration Process	2021	IEEE	RTS	NLP-ML
Understanding and Improving Regression Test Selection in Continuous Integration	2019	IEEE	RTS	Huristics
A Framework for Continuous Regression and Integration Testing in IoT Systems Based on Deep Learning and Search-Based Techniques	2020	IEEE	RTP	DL-ML
Learning-to-Rank vs Ranking-to-Learn: Strategies for Regression Testing in ContinuousIntegration	2020	IEEE	RTP	RL-ML
Cost-Effective Regression Testing Using Bloom Filters in Continuous Integration Development Environments	2017	IEEE	Cost	NA
Machine Learning Regression Techniques for Test Case Prioritization in ContinuousIntegration Environment	2022	IEEE	RTP	RL-ML
Build System Aware Multi-language Regression Test Selection in Continuous Integration	2022	IEEE	RTS	Adhoc
An Empirical Study of Regression Testing for Android Apps in Continuous Integration Environment	2023	IEEE	Cost	NA
Test case reduction and SWOA optimization for distributed agile software development using regression testing	2024	SCOPUS	RTP	Huristics
Regression tests provenance data in the continuous so ware engineering context	2017	SCOPUS	RTG	Adhoc
Cluster-based test cases prioritization and selection technique for agile regression testing	2017	SCOPUS	RTS,RTP	Adhoc
Estimation of regression test effort in agile projects	2016	SCOPUS	Cost	NA
Empirically evaluating readily available information for regression test optimization in continuous integration	2021	ACM	RTS,RTP	Adhoc
Techniques for improving regression testing in continuous integration development environments	2014	ACM	RTS,RTP	Adhoc
Measuring the cost of regression testing in practice: a study of Java projects using continuousintegration	2017	ACM	Cost	NA
Enhanced regression testing technique for agile software development and continuous integration strategies	2020	ACM	RTS,RTP	Huristics
Learning-based prioritization of test cases in continuous integration of highly-configurable software.	2020	GS	RTP	RL-ML

Xcs as a reinforcement learning approach to automatic test case prioritization.	2020	GS	RTP	RL-ML
Hybrid Framework To Exclude Similar and Faulty Test Cases In Regression Testing	2024	GS	RTP	Adhoc
Regression test selection in test-driven development	2024	GS	RTS	Adhoc
Embracing Unification: A Comprehensive Approach to Modern Test Case Prioritization.	2024	GS	RTP	Adhoc
A requirement-based regression test selection technique in behavior-driven development	2021	Snowball	RTS	Adhoc
Improved novel bat algorithm for test case prioritization and minimization	2022	GS	RTP,RTM	Huristics
A regression test case generation method for avionics software	2022	GS	RTG	Adhoc
Regression Testing Prioritization Technique Based on Historical Execution Information	2022	GS	RTP	NA
TCP-Net: Test Case Prioritization using End-to-End Deep Neural Networks	2022	Snowball	RTP	NN-ML
Reinforcement Learning Reward Function for Test Case Prioritization in Continuous Integration	2022	GS	RTP	RL-ML
Reinforcement Learning for Test Case Prioritization	2022	Snowball	RTP	RL-ML
A tag-based recommender system for regression test case prioritization	2021	Snowball	RTP	Adhoc
LSTM-based deep learning for spatial-temporal software testing	2020	Snowball	RTP	DL-ML
Reinforcement learning based test case prioritization for enhancing the security of software	2020	Snowball	RTP	RL-ML
A learning algorithm for optimizing continuous integration development and testing practice	2019	Snowball	RTM	Trees-ML
A study of regression test selection in continuous integration environments	2018	Snowball	RTS	Adhoc
Failure history data-based test case prioritization for effective regression test	2017	Snowball	RTP	Huristics
Reinforcement learning for automatic test case prioritization and selection in continuous integration	2017	Snowball	RTS,RTP	RL-ML

PAPER#	YEAR	Focus	Metric	Agile Type	Refs
S01	2024	RTP	Precision,Recall,F-score	Not specified	Singh, M., Chauhan, N., & Popli, R. (2024). Test case reduction and SWOA optimization for distributed agile software development using regression testing. <i>Multimedia Tools and Applications</i> , 1-26.
S02	2024	RTS	Num of test case	Not specified	Mafi, Z., & Mirian-Hosseiniabadi, S. H. (2024). Regression test selection in test-driven development. <i>Automated Software Engineering</i> , 31(1), 9.
S03	2024	RTP	NAPFD	Not specified	Vescan, A., Gacemu, R. D., & Szederjosi-Dragomir, A. (2024). Embracing Unification: A Comprehensive Approach to Modern Test Case Prioritization. In <i>ENASE</i> (pp. 396-405).
S04	2023	Cost	Cost of RTS	Continuous Intergration	Wang, D., Zhao, Y., Xiao, L., & Yu, T. (2023, October). An Empirical Study of Regression Testing for Android Apps in Continuous Integration Environment. In <i>2023 ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM)</i> (pp. 1-11). IEEE.
S05	2022	RTP	NAPFD	Continuous Intergration	Da Roza, E. A., Lima, J. A. P., Silva, R. C., & Vergilio, S. R. (2022, March). Machine learning regression techniques for test case prioritization in continuous integration environment. In <i>2022 IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER)</i> (pp. 196-206). IEEE.
S06	2022	RTS	Test Time Saving	Continuous Intergration	Elsner, D., Wuersching, R., Schnappinger, M., Pretschner, A., Graber, M., Dummer, R., & Reimer, S. (2022, May). Build system aware multi-language regression test selection in continuous integration. In <i>Proceedings of the 44th International Conference on Software Engineering: Software Engineering in Practice</i> (pp. 87-96).
S07	2022	RTP	FDR	Continuous Intergration	Chen, R., Xiao, Z., Xiao, L., & Li, Z. (2022, August). Regression Testing Prioritization Technique Based on Historical Execution Information. In <i>2022 International Conference on Machine Learning, Cloud Computing and Intelligent Mining (MLCCIM)</i> (pp. 276-281). IEEE.
S08	2022	RTP	FDR	Continuous Intergration	Abdelkarim, M., & ElAdawi, R. (2022, April). Top-net: Test case prioritization using end-to-end deep neural networks. In <i>2022 IEEE International Conference on Software Testing, Verification and Validation Workshops (ICSTW)</i> (pp. 122-129). IEEE.
S09	2022	RTP	NAPFD	Continuous Intergration	Murzaei, H., & Keyvanspour, M. R. (2022, March). Reinforcement Learning Reward Function for Test Case Prioritization in Continuous Integration. In <i>2022 9th Iranian Joint Congress on Fuzzy and Intelligent Systems (CFIS)</i> (pp. 1-6). IEEE.
S10	2022	RTP	NRPA,APFD	Continuous Intergration	Bagherzadeh, M., Kahani, N., & Briand, L. (2021). Reinforcement learning for test case prioritization. <i>IEEE Transactions on Software Engineering</i> , 48(8), 2836-2856.
S11	2021	RTS	MSR	Continuous Intergration	Kauhanen, E., Nurminen, J. K., Mikkonen, T., & Pashkovskiy, M. (2021, March). Regression test selection tool for python in continuous integration process. In <i>2021 IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER)</i> (pp. 618-621). IEEE.
S12	2021	RTS,RTP	APFDc	Continuous Intergration	Elsner, D., Hauer, F., Pretschner, A., & Reimer, S. (2021, July). Empirically evaluating readily available information for regression test optimization in continuous integration. In <i>Proceedings of the 30th acm sigsoft international symposium on software testing and analysis</i> (pp. 491-504).
S13	2021	RTS	Precision, Efficiency	BDD	Xu, J., Du, Q., & Li, X. (2021, July). A requirement-based regression test selection technique in behavior-driven development. In <i>2021 IEEE 45th Annual Computers, Software, and Applications Conference (COMPSAC)</i> (pp. 1303-1308). IEEE.
S14	2020	RTP	Time to Prioritize Tests	Continuous Intergration	Marjani, D., Gottlieb, A., & Sapkota, A. (2020, August). Neural network classification for improving continuous regression testing. In <i>2020 IEEE International Conference On Artificial Intelligence Testing (AITest)</i> (pp. 123-124). IEEE.
S15	2020	RTP	Precision	Continuous Intergration	Medhat, N., Moussa, S. M., Badr, N. L., & Tolba, M. F. (2020). A framework for continuous regression and integration testing in iot systems based on deep learning and search-based techniques. <i>IEEE Access</i> , 8, 215716-215726.
S16	2020	RTP	RPA	Continuous Intergration	Bertolino, A., Guerriero, A., Miranda, B., Pietrantuono, R., & Russo, S. (2020, June). Learning-to-rank vs ranking-to-learn: Strategies for regression testing in continuous integration. In <i>Proceedings of the ACM/IEEE 42nd International Conference on Software Engineering</i> (pp. 1-12).
S17	2020	RTS,RTP	APFD	Continuous Intergration	Ali, S., Hafeez, Y., Hussain, S., & Yang, S. (2020). Enhanced regression testing technique for agile software development and continuous integration strategies. <i>Software Quality Journal</i> , 28, 397-423.
S18	2020	RTP	NAPFD,RTFCNTR	Continuous Intergration	Lima, J. A. P., Mesquita, W. D., Vergilio, S. R., & Assouçlo, W. K. (2020, October). Learning-based prioritization of test cases in continuous integration of highly-configurable software. In <i>Proceedings of the 24th ACM conference on systems and software product line: Volume A-Volume A</i> (pp. 1-11).
S19	2020	RTP	APFD	Continuous Intergration	Xiao, L., Mao, H., Shi, T., & Hong, Y. (2020). LSTM-based deep learning for spatial-temporal software testing. <i>Distributed and Parallel Databases</i> , 38, 687-712.
S20	2020	RTP	APFD,NAPFD	Continuous Intergration	Shi, T., Xiao, L., & Wu, K. (2020, October). Reinforcement learning based test case prioritization for enhancing the security of software. In <i>2020 IEEE 7th International Conference on Data Science and Advanced Analytics (DSAA)</i> (pp. 663-672). IEEE.
S21	2019	RTS	Time Saved with RTS	Continuous Intergration	Shi, A., Zhao, P., & Marinov, D. (2019, October). Understanding and improving regression test selection in continuous integration. In <i>2019 IEEE 30th International Symposium on Software Reliability Engineering (ISSRE)</i> (pp. 228-238). IEEE.
S22	2019	RTM	Fault Detection vs Time Budgets	Continuous Intergration	Marjani, D., Gottlieb, A., & Liaen, M. (2019). A learning algorithm for optimizing continuous integration development and testing practice. <i>Software: Practice and Experience</i> , 49(2), 192-213.
S23	2018	RTS	Cost of RTS	Continuous Intergration	Yu, T., & Wang, T. (2018, October). A study of regression test selection in continuous integration environments. In <i>2018 IEEE 29th International Symposium on Software Reliability Engineering (ISSRE)</i> (pp. 135-143). IEEE.
S24	2017	Cost	Precision	Continuous Intergration	Kwon, J. H., & Ko, I. Y. (2017, December). Cost-effective regression testing using bloom filters in continuous integration development environments. In <i>2017 24th Asia-Pacific Software Engineering Conference (APSEC)</i> (pp. 160-168). IEEE.
S25	2017	RTG	Covergae	Continuous Intergration	de S. Campos Junior, H., de Paiva, C. A., Braga, R., Araújo, M. A. P., David, J. M. N., & Campos, F. (2017, September). Regression tests provenance data in the continuous software engineering context. In <i>Proceedings of the 2nd Brazilian Symposium on Systematic and Automated Software Testing</i> (pp. 1-6).
S26	2017	RTS,RTP	F-Score, APFD	Scrum	Kandil, P., Moussa, S., & Badr, N. (2017). Cluster-based test cases prioritization and selection technique for agile regression testing. <i>Journal of Software: Evolution and Process</i> , 29(6), e1794.
S27	2017	Cost	Cost	Continuous Intergration	Labuschagne, A., Inozemtseva, L., & Holmes, R. (2017, August). Measuring the cost of regression testing in practice: A study of Java projects using continuous integration. In <i>Proceedings of the 2017 11th joint meeting on foundations of software engineering</i> (pp. 821-830).
S28	2017	RTP	APFD	Continuous Intergration	Kim, J., Jeong, H., & Lee, E. (2017, April). Failure history data-based test case prioritization for effective regression test. In <i>Proceedings of the Symposium on Applied Computing</i> (pp. 1409-1415).
S29	2017	RTS,RTP	NAPFD	Continuous Intergration	Spieker, H., Gottlieb, A., Marjani, D., & Mossige, M. (2017, July). Reinforcement learning for automatic test case prioritization and selection in continuous integration. In <i>Proceedings of the 26th ACM SIGSOFT international symposium on software testing and analysis</i> (pp. 12-22).
S30	2016	RTP	APFD	Continuous Intergration	Marjani, D., & Liaen, M. (2016, October). Effect of time window on the performance of continuous regression testing. In <i>2016 IEEE International Conference on Software Maintenance and Evolution (ICSME)</i> (pp. 568-571). IEEE.
S31	2016	Cost	Cost of RT	Not specified	Arora, M., Chopra, S., & Gupta, P. (2016). Estimation of regression test effort in agile projects. <i>Far East J. Electron. Commun.</i> , 3, 741-753.
S32	2015	RTM,RTP	Covergae,Test Set Size	Not specified	Kandil, P., Moussa, S., & Badr, N. (2015, December). A methodology for regression testing reduction and prioritization of agile releases. In <i>2015 5th international conference on Information &amp; Communication Technology and accessibility (ICTA)</i> (pp. 1-6). IEEE.
S33	2014	RTS	Coverage	Not specified	Anita, N. C. (2014). A regression test selection technique by optimizing user stories in an agile environment. In <i>2014 IEEE International Advance Computing Conference (IACC)</i> (pp. 1454-1458).
S34	2014	RTS,RTP	APFD	Continuous Intergration	Elbaum, S., Rothermel, G., & Penix, J. (2014, November). Techniques for improving regression testing in continuous integration development environments. In <i>Proceedings of the 22nd ACM SIGSOFT International Symposium on Foundations of Software Engineering</i> (pp. 235-245).
S35	2013	RTP	APFDc vs Time	Continuous Intergration	Marjani, D., Gottlieb, A., & Sen, S. (2013, September). Test case prioritization for continuous regression testing: An industrial case study. In <i>2013 IEEE International Conference on Software Maintenance</i> (pp. 540-543). IEEE.

PAPER#	Metric	Metric	Count
S01	Precision,Recall,F-score	APFD and variants	15
S02	Num of test case	Precision	4
S03	NAPFD	Cost	4
S04	Cost of RTS	Coverage	3
S05	NAPFD	F-score	2
S06	Test Time Saving	FDR	2
S07	FDR	Recall	1
S08	FDR	NRPA	1
S09	NAPFD	MSR	1
S10	NRPA,APFD	Efficiency	1
S11	MSR	RPA	1
S12	APFDc	RFTC	1
S13	Precision, Efficiency	NTR	1
S14	Time to Prioritize Tests	Test Time Saving	1
S15	Precision	Time to Prioritize Tests	1
S16	RPA	Time Saved with RTS	1
S17	APFD	Fault Detection vs Time Budgets	1
S18	NAPFD,RFTC,NTR	Time (from "APFDc vs Time")	1
S19	APFD	Test Set Size	1
S20	APFD,NAPFD	Num of Test Case	1
S21	Time Saved with RTS		
S22	Fault Detection vs Time Budgets		
S23	Cost of RTS		
S24	Precision		
S25	Covergae		
S26	F-Score, APFD		
S27	Cost		
S28	APFD		
S29	NAPFD		
S30	APFD		
S31	Cost of RT		
S32	Covergae,Test Set Size		
S33	Coverage		
S34	APFD		
S35	APFDc vs Time		

