

CMPUT 402/501

List of related research papers

Dr. Sarah Nadi -- University of Alberta

This is a list of research papers on topics related to software quality. You can use these papers as inspiration for your course project or as examples of how a research paper looks like.

1. [The Seven Sins: Security Smells in Infrastructure as Code Scripts](#), Rahman et al., ICSE '19.
2. [BugSwarm: Mining and Continuously Growing a Dataset of Reproducible Failures and Fixes](#), Dmeiri et al., ICSE '19. -- paper should be available on the website under publications soon. You can also directly contact the authors if it doesn't get posted soon.
3. [Mining Historical Test Logs to Predict Bugs and Localize Faults in the Test Logs](#), Amar and Rigby, ICSE '19. -- preprint should be available soon. You can also directly contact the authors for a version.
4. [A Large-Scale Study of Test Coverage Evolution](#), Hilton et al., ASE '18.
5. [An Automated Approach to Estimating Code Coverage Measures Using Execution Logs](#), Chen et al., ASE '18.
6. [One Size Does Not Fit All: An Empirical Study of Containerized Continuous Deployment Workflows](#), Zhang et al., FSE '18.
7. [Modern Release Engineering in a Nutshell -- Why Researchers Should Care](#), Adams and McIntosh, SANER '16.
8. [The Art of Testing Less without Sacrificing Quality](#), Herzig et al., ICSE '15.
9. [Predicting Bugs from History](#), Zimmermann et al.
10. [An Empirical Study on the Effect of Modern Code Review Practices on Software Quality](#), Adams and McIntosh, ESE '16.
11. [Are Refactorings to Blame? An Empirical Study of Refactorings in Merge Conflicts](#),

Mahmoudi and Nadi, SANER '19.

12. [Automatic Identification of Bug-Introducing Changes](#), Kim et al., ASE '06.
13. [Mining Metrics to Predict Component Failures](#), Nagappan et al., ICSE '06.
14. [Forked and integrated variants in an open-source firmware project](#), Stănciulescu et al., ICSME '15.
15. [Software Practitioners View on Merge](#), McKee et al., ICSME '17.
16. [Why We Refactor? Confessions of GitHub Contributors](#), Silva et al., FSE '16.
17. [Mining API patterns as partial orders from source code: from usage scenarios to specifications](#), Acharya et al., FSE '07.
18. [API Change and Fault Proneness: A Threat to the Success of Android Apps](#), Linares-Vásquez et al., FSE '13.
19. [Security Versus Performance Bugs: A Case Study on Firefox](#), Zaman et al., MSR '11.
20. [Mining Analogical Libraries in Q&A Discussions -- Incorporating Relational and Categorical Knowledge into Word Embedding](#), Chen et al., SANER '16.
21. [Learning from Examples to Improve Code Completion Systems](#), Bruch et al., FSE '09.
22. [Categorizing the Content of GitHub README Files](#). G. A. A. Prana, C. Treude, F. Thung, T. Atapattu, and D. Lo. Empirical Software Engineering, 2018.
23. [Adding sparkle to social coding: an empirical study of repository badges in the npm ecosystem](#). Trockman et al., ICSE '18
24. [Detecting Missing Information in Bug Descriptions](#), Chaparro et al., FSE '17.
25. [Coverage is not strongly correlated with test suite effectiveness](#), ICSE '14
26. [Are Mutants a Valid Substitute for Real Faults in Software Testing?](#), FSE '14
27. [Configuration Smells in Continuous Delivery Pipelines: A Linter and A Six-Month Study on GitLab](#), FSE '20
28. [Detecting Numerical Bugs in Neural Network Architectures](#), FSE '20
29. [FrUITeR: A Framework for Evaluating UI Test Reuse](#), FSE '20

