Quantifying, Characterizing, and Mitigating Flakily Covered Program Elements

APPENDIX

This document is the online appendix for "Quantifying, Characterizing, and Mitigating Flakily Covered Program Elements". This document includes bean plots that are used to visually compare various characteristics.
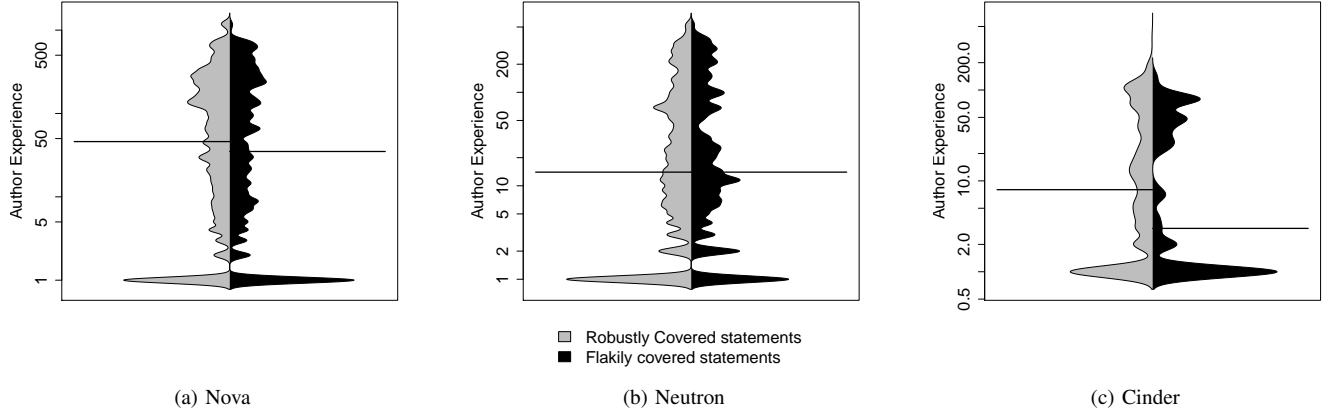

(a) Nova   (b) Neutron   (c) Cinder

Fig. 1: Comparison of experience values of last-known authors of robustly covered vs flakily covered statements. We cannot distinguish between robustly covered and flakily covered statements based on the experience of the last-known author of the statement.
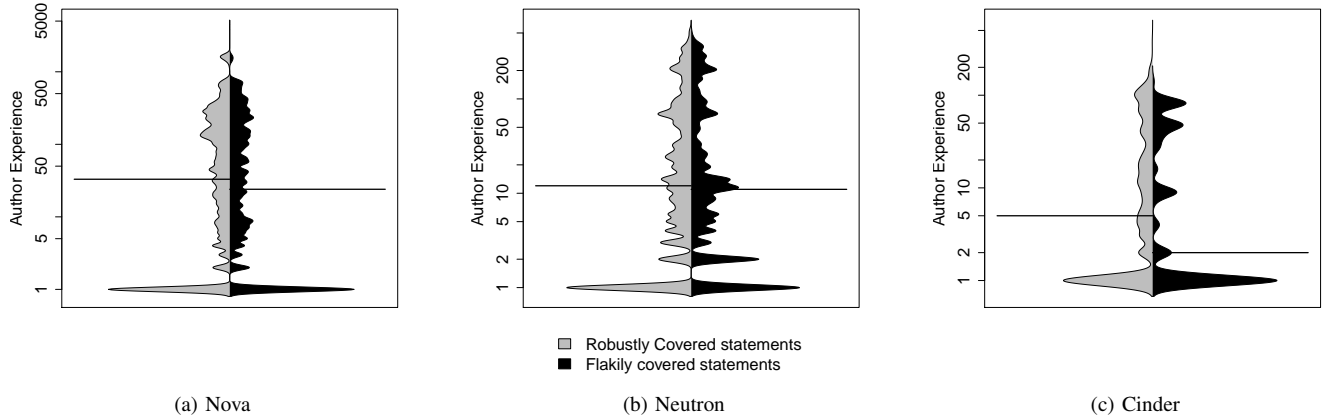

(a) Nova   (b) Neutron   (c) Cinder

Fig. 2: Comparison of experience values of all authors for robustly covered vs flakily covered statements. We cannot distinguish between robustly covered and flakily covered statements based on experience values of all the authors of a statement.
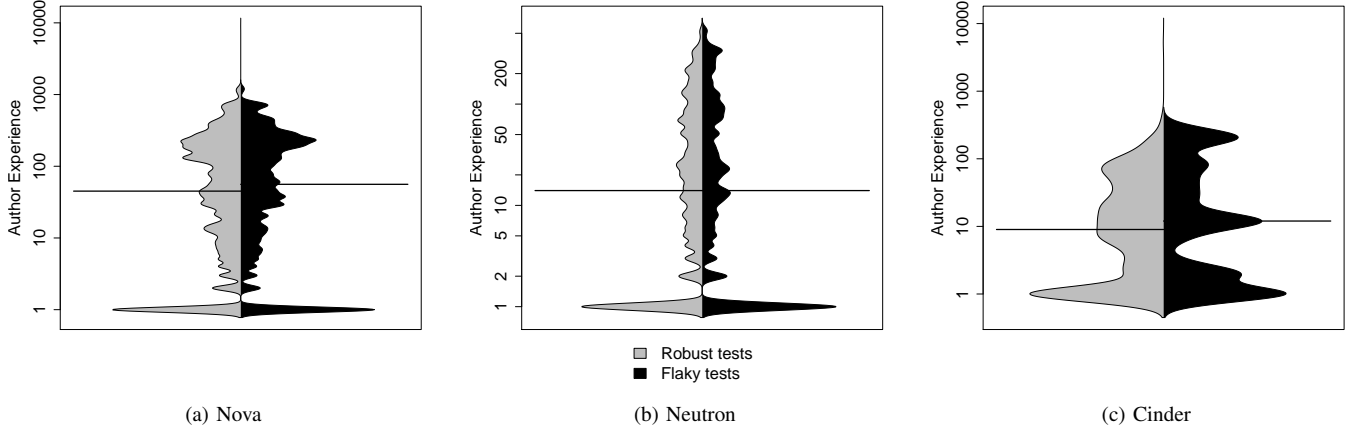
(a) Nova (b) Neutron (c) Cinder

Fig. 3: Comparison of experience values of last-known authors in flaky vs non-flaky tests. We observe negligible differences in all three projects.
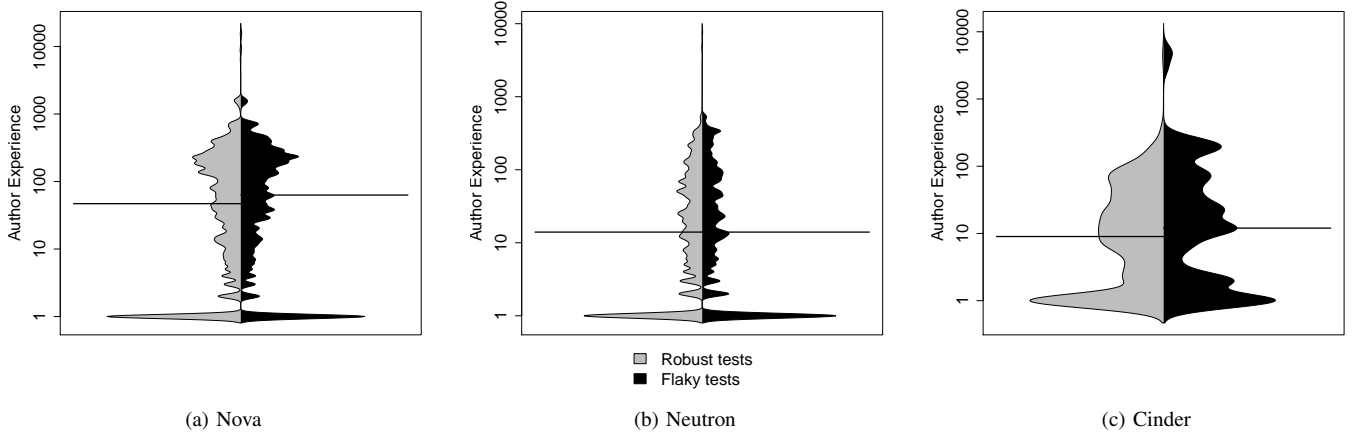

(a) Nova (b) Neutron (c) Cinder

Fig. 4: Comparison of experience values of all authors in flaky vs non-flaky Tests. We observe negligible differences in all three projects.
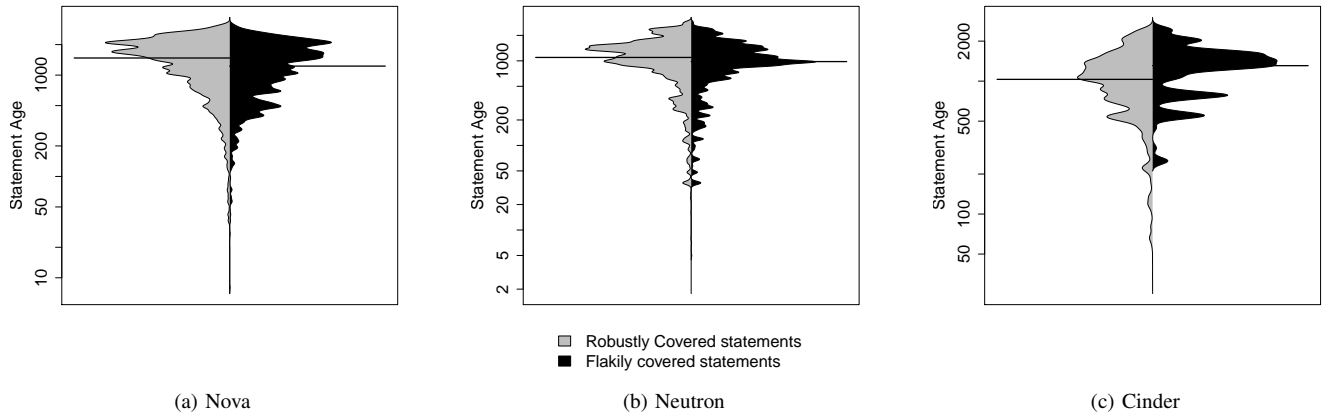

(a) Nova (b) Neutron (c) Cinder

Fig. 5: Comparison of age of robustly covered vs flakily covered statements. Flakily covered statements are similar to robustly covered statements in terms of age.

(a) Nova

(b) Neutron

□ Robustly Covered statements
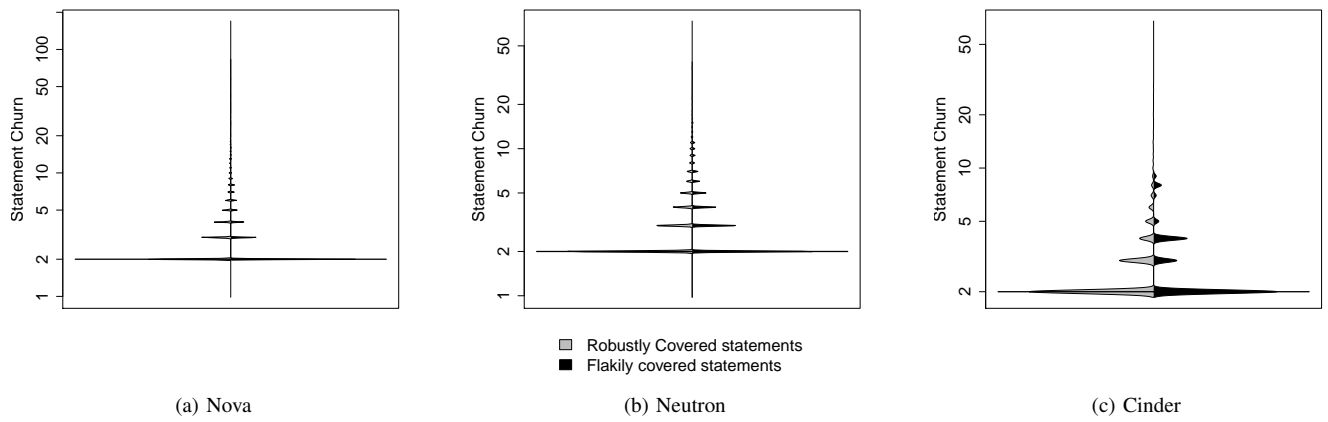■ Flakily covered statements

(c) Cinder

Fig. 6: Comparison of churn of robustly covered vs flakily covered statements. Flakily covered statements are similar to robustly covered statements in terms of churn.