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A Theoretical Analysis on Cloning the Failed Test Cases to Improve Spectrum-based Fault Localization

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Highlights

- The cloning of failed test cases is studied in three fault-localization scenarios.
- The accuracy of 33 popular techniques is evaluated, using four expense metrics.
- On about two thirds of them, statistically significant improvements are observed.
- On about one third of them, the accuracy is observed and proved unaffected.
- Accuracy improvements on 19 of them are theoretically confirmed in one scenario.

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