COMP3211 Homework 2

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Paper Summary

The paper examines the **crosstab-based statistical method**, which applies an explicit statistical analysis model to perform automated *Fault localization.*

In the **crosstab** analysis model, a **crosstab** is composed for each executable statement to reflect their suspiciousness. By running a hypothesis test involving computations of χ-square test, contingency coefficient m, and statistic ζ to each **crosstab**, a suspiciousness index ζ can be obtained for each of them. The statement with the highest suspiciousness index is being inspected first.

Experiment results indicate **crosstab** performs more effectively than other techniques in detecting faults, and it operates as efficiently as *Tarantula.*