

COMP3211 Homework 1

JAHJA Darwin, 16094501d

Paper Summary

The paper examines five different techniques for performing automated *Fault localization*, the most expensive debugging activity and evaluates the performance of *Tarantula* based on the effectiveness and efficiency rankings among the five.

The intuition of *Tarantula* is to get correlations between test-case outcomes and execution events – events correlating advantageously with failure are being investigated first.

The result indicates *Tarantula* outperforms other techniques consistently regarding effectiveness, and has similar cost to the most efficient techniques. Under the same score-level, it can identify noticeably more faults. However, the proportion that does not required to be analyzed in the program is concerned.