

## Automatic Detection of Pseudo-Tested Methods in a Test Suite Using Fault Injection

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# Problem

Introduction

**Problem**

Coverage

Pseudo-tested  
Methods

How can we know if our test suites  
are adequate?



## Coverage %

**Def:** % of a system that has been tested.

# Calculation

Introduction

Problem

Coverage

**Calculation**

Coverage vs

Adequate

Coverage

Pseudo-tested

Methods

$$\text{Coverage} = \frac{\text{Number of Tested Methods}}{\text{Total Number of Methods}}$$

# High Coverage

Introduction

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Coverage

Calculation

Coverage vs  
Adequate  
Coverage

Pseudo-tested  
Methods



# Pseudo-tested Methods

Introduction

Problem

**Pseudo-tested  
Methods**

Defintion

Detection

## Pseudo-tested Methods

## What is a Pseudo-tested Method?

**PASSED**

**Def:** It will never fail.

## How Can We Detect Pseudo-tested Methods

**It is harder than you think!**