Scenario-based Models and Mutation Testing

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Research on Scenario-based Models

- An analysis of concurrency pathologies on Message Sequence Charts (MSCs) [1].
- Solve the chaotic situation by building a pathology framework [2].

Research on Testing from MSCs

- A distributed test framework based on MSCs [3].
- Identify and solve the controllability problems in testing from MSCs [4].
- Tackle the ORACLE roblem in testing from MSCs [5].

Research on Semantic Mutation Testing

- Help to develop Semantic Mutation Testing (SMT) [6, 7].
- Implement SMT-C – a SMT tool for C [8].
- An analysis of floating point comparison problem using SMT [9].

Others

- Information squeeziness and failed error propagation [10].
- Data dependence mutation.
- Mutation analysis of memory related bugs.

References

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