

Software Product Lines

11. Product-Line Testing

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Overview – 11. Product-Line Testing

Combinatorial Interaction Testing

- Motivation
- Pairwise Interaction Testing
- A Greedy Algorithm
- Meta-Heuristic Search
- T-Wise Interaction Testing
- Effectiveness of Combinatorial Interaction Testing
- Efficiency of Combinatorial Interaction Testing
- Summary

Solution-Space Sampling

- Coverage in Single-System Engineering
- Coverage of Ifdef Blocks

- Presence-Condition Coverage
- Encoding Solution Space in Feature Models
- Overview on Coverage Criteria
- Overview on Input for Sampling Algorithms
- Summary

Sampling without Coverage

- Random Sampling
- Uniform Random Sampling
- Automation in Product Sampling
- Expert Knowledge in Sampling
- Testing the Linux Kernel
- Missing: Test-Case Selection/Generation
- Summary

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Summary – Combinatorial Interaction Testing

Lessons Learned

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Further Reading

▶ ...

Practice

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