Calculating Information Leakage using Model Checking Tools

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Outline

- Title Explanation

- Method and Improvement

- Experiment and Result

- Conclusion and Discussion

Calculating Information Leakage using Model Checking Tools

- Information Leakage

Calculating Information Leakage using Model Checking Tools

- Model checking tools
  - Getafix
  - jMoped

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Method

- Double loop

- Single loop and array

Improvement

- Discovery by mistake

- 2nd/final take

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Experiment

- Environment
- Lenovo ideapad Y580-IFI
- Ubuntu 14.04 LTS 32-bit

Experiment

- Tests
- 7 tests from paper \cite{}

Results->direct exec double loop

Results->getafix

Results->jmoped

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Conclusion

- Our solution can't beat direct execution

- But the optimization can improve performance greatly

The End

Thank you for listening