

CIVL: A Symbolic Execution Tool for C Programs

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1 Introduction

The goal of this section is to motivate the problem and introduce the tool.

The problem 1 or 2 paragraphs talking about the problem that the tool attempts to solve. Things to include

- Why the problem is interesting
- Why is it challenging
- You can include some real-world examples here to motivate the problem

Existing approaches 1 paragraph describing some other main approaches to solve this problem? What are their limitations? E.g., it doesn't scale, or make certain big assumptions (cannot deal with pointers or loops).

Your tool 1 paragraph describing your tool:

- **briefly** describes its technical details.
- Show how the tool addresses previous limitations

Evaluation 1 paragraph describe how you evaluate the tool, e.g., ran it on some non-trivial, real world applications and it produces awesome results.

2 Example

The goal of this section is to show a running example of the tool.

A small example 1 paragraph use a small example to highlight the power of the tool. So list a small program /code snippet here. Describe what it is and what you want to do with it.

Demonstration 2-3 paragraphs show how the tool works on the example and what output it produces. Also describe why these results are useful.

3 Technical Details

The goal of this section is to describe the technical algorithms of the tools. This should be the longest section and show that you understand the tool in depth.

Additional things:

- If needed, use examples throughout the section to demonstrate something interesting.

- If applicable, describe the complexity of the tools
- Also describe limitations (give examples to demonstrate if needed)
- Should also include a paragraph talking about the implementation of the tool, e.g., requires Java to run, analyze C programs, requires external tools, etc

4 Evaluation

The goal of this section is to describe how to you apply the tool to some realistic programs (e.g., from GitHub). Clearly describe the programs, your goals (e.g., what do you want to analyze), how you run the tool on them, and the results. Describe the results in depth (including running time etc).

5 Related Work (Optional)

Describe existing works solving the same problem and tell why your tool is different

6 Conclusion

Conclude, not summarize (If you don't know the difference, check Google!)

References