Optimizing Away Security in C

Project Report, Language-Based Security, Fall 2023, Aarhus University

Anders B. Clausen Johan T. Degn Jonathan Eilath

{clausen, johandegn, eilath}@post.au.dk

June, 2023

Abstract

Lorem ipsum...



Contents

1	Introduction	1
	1.1 Related Work	1
	1.2 Contributions	
	1.3 Overview	
2		1
	2.1 C Compiler Optimzations	1
	2.2 Side-Channel Attacks	
3	OptiFuzz	1
	3.1 Code Generation	1
	3.2 Assembly Inspection	1
	3.3 Fuzzing	
	3.4 Visualization	
4	Experimental Results	1
5	Conclusion and Future Work	1

1 Introduction

- 1.1 Related Work
- 1.2 Contributions
- 1.3 Overview
- 2 Preliminaries
- 2.1 C Compiler Optimzations
- 2.2 Side-Channel Attacks
- 3 OptiFuzz
- 3.1 Code Generation
- 3.2 Assembly Inspection
- 3.3 Fuzzing
- 3.4 Visualization
- 4 Experimental Results
- 5 Conclusion and Future Work