Design Characteristics of Honeypots - with an Aim to Study Botnets

by

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A Dissertation submitted to the University of Dublin, Trinity College in fulfillment of the requirements for the degree of Master of Computer Engineering

May 2018

Declaration

I, the undersigned, declare that this work has not previously been submitted as an exercise for a degree at this, or any other University, and that unless otherwise stated, is my own work.

Amber Higgins

March 11, 2018

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Amber Higgins

 $March\ 11,\ 2018$

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Abstract

The abstract or summary or whatever... $\,$

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Introduction

The section following the chapter title should give an overview of overview of the chapter in 1 to 3 paragraphs. In any document, a title should always be followed by text; a title should never be followed immediately by another title.

1.1 Context

The Context section should let the reader know about the general area in which the dissertation is located.

Paragraphs should start with a general sentence and then explain the sentence. The reader should see what the paragraph is about and then find out the details about the statement of the first sentence. In general, a paragraph should consist of two or more sentences.

An example of how to reference a figure in the thesis document; see figure 1.1.

1.2 Overview

Giving the reader a short overview of the finding of the dissertation without going into detail, describing briefly the findings of the following chapters and the overall outcome.



Figure 1.1: This caption should describe the figure to the reader and explain to the reader the meaning of the figure. If the interpretation of a figure is left to the reader, the reader will misinterpret the figure!

1.3 Roadmap

A description of the structure of the dissertation that explains to the reader the contents of the following chapters and the thoughts behind the layout of the dissertation. The chapters following the introduction...

State of the art

This chapter should explain the existing work of the areas that your work is based on. The introduction should explain to the reader the area of the work as a whole, how the individual area contribute to the work and what the reader will find in the discussion of each of the areas. The idea is that the reader will be aware of the general contents of the state of the art and will not be surprised by any of the issues that are being discussed.

2.1 Area 1

Explanation of existing work of a given area that describes the area as a whole, how it fits into the work and then breaking it down into components that are relevant to the work.

An example for possible citations (?) or by ?.

2.1.1 Issue A

Starting with a general description of the issue; then drilling down into the details of the issue and how it has been covered in the literature. For a skeleton at the beginning of the writing, this text should be replaced by a general short description, so that you know what you want to discuss and can review the sequence of the discussion.

2.1.2 Issue B

Starting with a general description of the issue; then drilling down into the details of the issue and how it has been covered in the literature. For a skeleton at the beginning of the writing, this text should be replaced by a general short description, so that you know what you want to discuss and can review the sequence of the discussion.

2.1.3 Issue C

Starting with a general description of the issue; then drilling down into the details of the issue and how it has been covered in the literature. For a skeleton at the beginning of the writing, this text should be replaced by a general short description, so that you know what you want to discuss and can review the sequence of the discussion.

2.2 Closely-related Projects

A discussion of closely-related projects that have covered similar topics and address similar issues to the work that will be presented in the following chapters.

2.2.1 Project 1

Discussion of a closely-related project and a description of its approach with references to the topics discussed above.

2.3 Summary

This section should summarize the essential points of the state-of-the-art and give the reader an overview of relevant projects; ideally, this can be summed up by providing a table (see table 2.1) with the relevant projects and issues that they address.

Column 1	Column 2	Column 3	Column 4
Row 1	Item 1	Item 2	Item 3
Row 2	Item 1	Item 2	Item 3
Row 3	Item 1	Item 2	Item 3
Row 4	Item 1	Item 2	Item 3

Table 2.1: Caption that explains the table to the reader

Design

Description of the Design chapter and its contents.

3.1 Overview

General discussion of the design and the overall decisions that were made.

- **3.2** Detail 1
- 3.3 Detail 2
- 3.4 Summary

Implementation

4.1 Overview

4.2 Detail 1

```
x = 1
if x == 1:
    # indented four spaces
    print("x is 1.")
```

Listing 4.1: Lengthy caption explaining the code to the reader

4.3 Detail 2

4.4 Summary

Evaluation

5.1 Experimental Setup

Describes the experimental setup and the values that were defined for the variables as given in table 5.1.

Column 1	Column 2
Row 1	Item 1
Row 2	Item 1
Row 3	Item 1
Row 4	Item 1

Table 5.1: Caption that explains the table to the reader

5.2 Experiment 1

Figure 5.1 shows measurements.

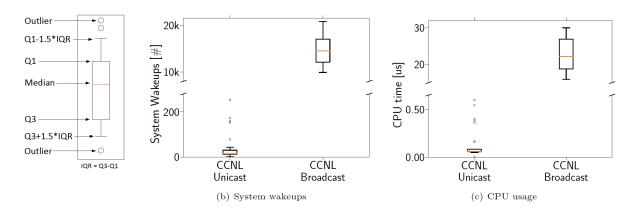


Figure 5.1: Long caption that describes the figure to the reader

5.3 Experiment 2

5.4 Experiment 3

5.5 Discussion

5.6 Summary

Conclusions & Future Work

- 6.1 Conclusions
- 6.2 Future Work

Appendix A

Abbreviations

Short Term	Expanded Term
DNS	Domain Name System
DHCP	Dynamic Host Configuration Protocol