CSEC 793 Capstone in Computing Security
Project Report

# THIS IS MY MS CAPSTONE REPORT

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# 1 Abstract

This section provides on overview about the project. It should be completed at the very last stage of writing, i.e., after you have completed all the other sections.

# 2 Introduction

In this section, you need to address the following items:

- The goal of this project
- The rationale of the project
- The importance of the project
- Your main contributions to the project

# 3 Literature Review

- How, when the problem was raised by whom, what event, etc.
- Any attempts have been proposed to address the problems
- Pros and Cons of each existing solution
- How does your proposed solution fit within here, i.e., is your solution improving an existing solution, just another solution, or revolutionizing the way of thinking?

Make sure to cite references. Here is how to cite the great textbook written by Knuth [1] in the LaTeX. Here is the way how to cite a journal article written by Alan Turing [2].

# 4 Your project idea

In this section, first redefine the problem in great details. Then describe your solutions. Try to use as many illustrations such as pictures, graphs, pseudo code as you see fit. Here are some examples of including pictures, graphs, and pseudo code in LaTeX.

Figure 1 shows how to include a picture in a LaTeX document.

Figure 2 is a sample pseudo code copied from this site [3].

Figure 3 is a sample float chart is copied from this website [4]

Figure 1: This is my great security design.

**Algorithm 4.1:** REDUCE$(projection, x, y, f)$

**for** $i \leftarrow 1$ **to** $y/f$
**do** {
  **for** $j \leftarrow 1$ **to** $x/f$
  **do** {
    $sum \leftarrow 0$
    **for** $m \leftarrow 1$ **to** $f$
    **do** {
      **for** $n \leftarrow 1$ **to** $f$
      **do** $sum = sum + projection[i * f + m][j * f + n]$
    }
    $reducedProjection[i][j] = sum/(f * f)$
  }
}
**return** $(reducedProjection)$

Figure 2: This is my great pseudo code

### 4.1 Mathematics

If your project idea needs mathematics to formulate your methods, LaTeX is great at typesetting mathematics. Let $X_1, X_2, \ldots, X_n$ be a sequence of independent and identically distributed random variables with $\mathrm{E}[X_i] = \mu$ and $\mathrm{Var}[X_i] = \sigma^2 < \infty$, and let

$$S_n = \frac{X_1 + X_2 + \cdots + X_n}{n} = \frac{1}{n} \sum_{i}^{n} X_i$$

denote their mean. Then as $n$ approaches infinity, the random variables $\sqrt{n}(S_n - \mu)$ converge in distribution to a normal $\mathcal{N}(0, \sigma^2)$.

## 5 Project Implementation

In this section, describe details of your project design and implementation, document challenges and obstacles and how you overcome them in design and implementation.

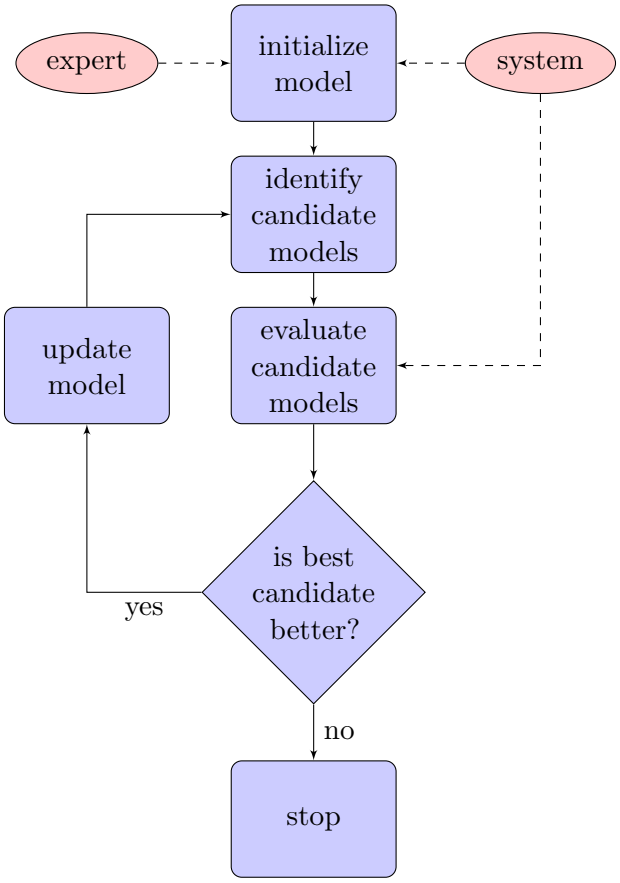


Figure 3: This is my great float chart

## 6 Testing and Experiments

In this section, describe your testing and experiment design and setup, and conduct the testing and experiments, and generate data.

Need to explain why your experiment design will do what is supposed to do, and describe the expected result, and how the result may validate your ideas and/or support your project.

## 7 Data Analysis

Based on the data generated from the testing and experiments, we derived the following results. The global temperature is increasing at an alarming rate as illustrated in Figure 4. It is not real data, it is for demonstration only.

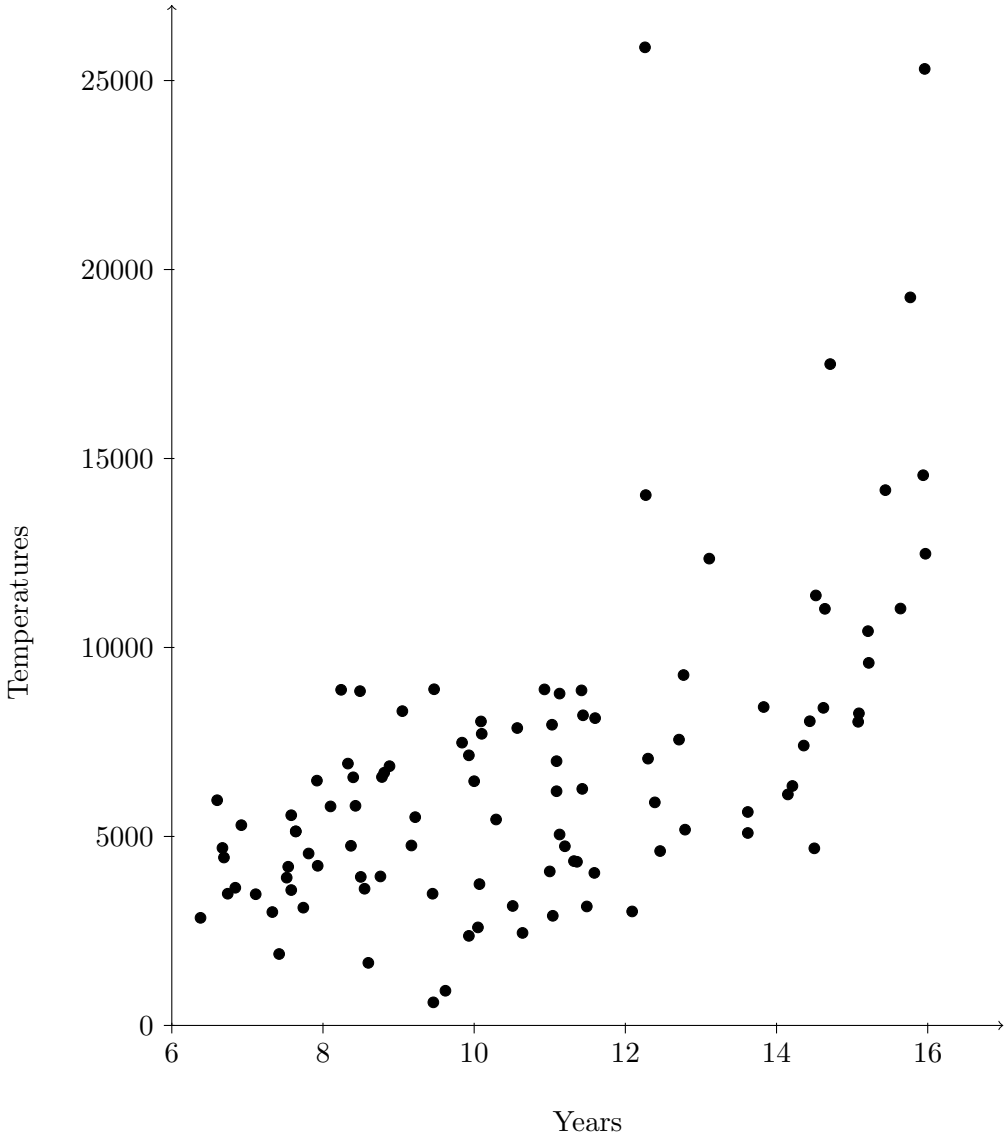


Figure 4: Recent Global Temperature Data

## 8 Conclusion

In this section, you should provide a concise summary of your work, state the importance of your idea and your contribution towards solving the problem. Point out any improvement could be done if you had more time. List some ideas as future work.

## 9 Acknowledgment

I thank my advisor for the guidance and I appreciate the financial support from my family and sponsors, ....

## References

[1] D. E. Knuth, *Art of Computer Programming, Volume 4, Fascicle 4, The: Generating All Trees–History of Combinatorial Generation.* Addison-Wesley Professional, 2006.

[2] A. M. Turing, "Computing machinery and intelligence," *Mind*, vol. 59, no. 236, pp. 433–460, 1950.

[3] S. Smallen, "Pseudo code." [Online]. Available: http://users.sdsc.edu/ ssmallen/latex/pseudocode.html

[4] K. M. Fauske, "Example: Simple flow chart." [Online]. Available: http://www.texample.net/tikz/examples/simple-flow-chart/