Title of Thesis with all Formula, Symbols, or Greek Letters Written out in Words

by

Patrick Di Salvo

 $\begin{array}{c} {\rm A~Thesis} \\ {\rm presented~to} \end{array}$ The University of Guelph

In partial fulfilment of requirements for the degree of

Master of Pokemon, Poke master in

Computer Science

Guelph, Ontario, Canada © Patrick Di Salvo, July, 2099

ABSTRACT

TITLE OF THESIS WITH ALL FORMULA,
SYMBOLS, OR GREEK LETTERS WRITTEN OUT IN WORDS

Patrick Di Salvo University of Guelph, 2099 Advisor:

Dr. Sherlock Holmes

Present your abstract here. This template is just an example of an outline to consider for your thesis. It is a good idea to double-check with the current University's thesis requirements here:

https://www.uoguelph.ca/graduatestudies/current-students/preparation-your-thesis

Acknowledgments

 $\label{eq:constraint} Present \ your \ acknowledgements \ here.$

Table of Contents

Li	List of Tables vi						
Li							
1	Introduction						
	1.1	Thesis	s Statement	2			
	1.2	Overv	view of Thesis	2			
2	Background						
	2.1	Litera	ture Review	6			
	2.2	Efficient Enumeration of Laddder Lotteries and its Application					
	2.3	B Ladder-Lottery Realization					
	2.4	Optin	nal Reconfiguration of Optimal Ladder Lotteries	11			
	2.5	Efficie	ent Enumeration of all Ladder Lotteries with K Bars	13			
	2.6	.6 Coding Latter Lotteries					
		2.6.1	Overview	13			
		2.6.2	Route Based Encoding	13			
		2.6.3	Line Based Encoding	14			
		2.6.4	Improved Line-Based Encoding	16			
	2.7	7 Enumeration, Counting, and Random Generation of Ladder Lotteric					
		2.7.1	Enumeration	20			
		2.7.2	Counting	21			
		2.7.3	Random Genearation	24			
3	Met	Methodology and Implementation					
	3.1	The L	sisting Problem	26			
		3.1.1	Introduction to the Problem	26			
		3.1.2	Procedure	31			
		3.1.3	Results	56			
		3.1.4	Analysis	57			
	3.2	The N	Ainimum Height Problem	50			

4	Evaluation	60
5	Summary and Future Work	61

List of Tables

3.1	Table for all 4!, 24, permutations of order 4	27
3.2	The table with the runtimes for listing $CanL\{\pi_N\}$ using the Cyclic	
	Inversion Algorithm and Modified SJT Algorithm	57