SECURE DATA STRUCTURES AND THEIR APPLICATIONS

By

SAM A. MARKELON

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
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DOCTOR OF PHILOSOPHY

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For my dearest Julia, without whom this would mean less

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Abstract of Dissertation Presented to the Graduate School
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Sam A. Markelon

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Chair: Vincent Bindschaedler
Major: Computer Science

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CHAPTER 1
INTRODUCTION

TODO!

CHAPTER 2
BACKGROUND

TODO!

CHAPTER 3
COMPACT FREQUENCY ESTIMATORS IN ADVERSARIAL ENVIRONMENTS

TODO!

CHAPTER 4
PROBABILISTIC DATA STRUCTURES IN THE WILD: A SECURITY ANALYSIS OF REDIS

TODO!

CHAPTER 5
PROVABLY ROBUST SKIPPING-BASED PROBABILISTIC DATA STRUCTURES

TODO!

CHAPTER 6
COMPACT, VERIFIABLE, AND PRIVATE DATA STRUCTURES

TODO!

CHAPTER 7
CONCLUSION AND FUTURE WORK

TODO!

BIOGRAPHICAL SKETCH

- Nmae plus Research interests
- PhD at UF
- UConn – BS + Goldwater Scholar
- Proof trading