THESIS OR DISSERTATION TITLE
TITLE LINE 2

by

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Abstract

Put your abstract here.

Acknowledgements

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Chapter 1

Introduction

1.1 Motivation

Since the advent of modern digital communications in the 20th century there has been an explosion in the demand for wireless spectrum. As a result spectrum is becoming an increasingly scare resource(Insert citation). This demand is a direct result of the availability and relatively inexpensive cost of such wireless device. Therefore in such envirorments as militaristic theatres the probability of interfering transmissions has steadily grown to a point where techniques need to be consider to combat such occurrences. More directly, in such situations when interfering signals are partially or completely understood measures can be taken to overcome such difficulties.

In military theatres it is extremely common to observe friendly operated high-power broadband jamming signals(citation). Such devices exists as part of group convoys in several branches of the military and in many other forms in contested territories or war-zones. Unfortunately such devices block both friendly and hostile communications, and current anti-jamming techniques haven't provided a viable solution to this problem. Therefore new avenues should be considered, utilizing more flexible radio technologies.

Understanding how to overcome such challenges is a complex task; with vastly different

transmission envirorments and differing operating devices and operating standards. A new system that could combat such downfalls should rely on all friendly information, or be able to construct solutions of its own from a set of tools given to the radio. Such tools should be flexible and easily modified, changed, or improved. This ability to easily change or adapt is a key feature as the technical requirements can change from day to day, or between branches of the military itself. As such a solution should have the following attributes:

- **Flexible:**
- **Resilient:**
- **Hardened:** in changing enviroments

1.2 State of the Art

Chapter 2

Background

Here is some background you'll need to know about my research.

2.1 Background subsection

Just a small section for part of the background of my research. [1]

Bibliography

[1] The Author, *Awesome book*, WPI Press, 2008.