# Approaches to Joint Base Station Selection and Adaptive Slicing in Virtualized Wireless Networks

Kory A. Teague

Thesis submitted to the Faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Master of Science in Electrical Engineering

Allen B. MacKenzie, Chair Luiz DaSilva R. Michael Buehrer Mohammad J. Abdel-Rahman

> May 1, 2018 (TBD) Blacksburg, Virginia

Keywords: TBD Copyright 2018, Kory A. Teague

# Approaches to Joint Base Station Selection and Adaptive Slicing in Virtualized Wireless Networks

Kory A. Teague

(ABSTRACT)

### Contents

1	Introduction				
2	Literature Review	3			
3	VNB Model	4			
	3.1 Network Area Definitions	4			
	3.2 Stochastic Optimization	4			
4	Approach Approximations	5			
5	5 Testing and Simulations				
6	Conclusions	7			

## List of Figures

### List of Tables

1.1 The Graduate School wants captions above the tables	1.1	The Graduate School	ol wants captions	above the tables.	
---	-----	---------------------	-------------------	-------------------	--

#### Introduction

William Shakespeare has profoundly affected the field of literature worldwide. In the United States there was a surge of Shakespearean literature starting in the 1960s, with the opening of the Montgomery Shakespearean festival and continuing into the present ...

Table 1.1: The Graduate School wants captions above the tables.

X	1	2
1	1	2
2	2	4

### Literature Review

#### VNB Model

- 3.1 Network Area Definitions
- 3.2 Stochastic Optimization

### **Approximation Approaches**

- 4.1 Deterministic Equivalent Program
- 4.1.1 Adaptive Slicing
- 4.2 Genetic Algorithm

Testing and Simulations

Conclusions