

# Data Science: Machine Learning

Samantha Scott<sup>a</sup>

<sup>a</sup>*Stellenbosch University, Cape Town, South Africa*

---

*Keywords:* Machine Learning, Heart Disease Prediction, Random Forests

---

---

*Email address:* 20945043@sun.ac.za (Samantha Scott)

## Table of Contents

<b>1</b>	<b>Introduction</b>	<b>3</b>
<b>2</b>	<b>Research Question</b>	<b>3</b>
<b>3</b>	<b>Data and Methodology</b>	<b>3</b>
<b>4</b>	<b>Results</b>	<b>3</b>
4.1	Linear Regression . . . . .	3
4.2	Random Forests . . . . .	3
4.3	Support Vector Machine . . . . .	3
<b>5</b>	<b>Conclusion</b>	<b>3</b>
<b>6</b>	<b>Reference List</b>	<b>3</b>

## 1. Introduction

The following paper is a comparison between two Machine Learning algorithms, namely Random Forests and Support Vector Machines, as prediction tools.

## 2. Research Question

## 3. Data and Methodology

## 4. Results

### *4.1. Linear Regression*

```
## [1] 0.3684575
```

### *4.2. Random Forests*

```
##  
##      0  1  
##    0 16  8  
##    1  7 23
```

```
## [1] 0.7222222
```

### *4.3. Support Vector Machine*

## 5. Conclusion

## 6. Reference List