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# Introduction

# Chapter 1

## Statement of the Problem

### 1.1 Definition and Applications

#### 1.2 Feature Selection

# Chapter 2

## Basic Methods

### 2.1 Naive Bayes Classifier

## 2.2 k Nearest Neighbors Classifier

#### 2.3 Artificial Neural Network Classifier

#### 2.4 SVM Classifier

### 2.5 Boosting

# Chapter 3

# Advanced Approaches

### 3.1 Combined Boosting

### 3.2 Adaptive Feature Selection

# Conclusion

## References

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