

STATE UNIVERSITY AT BUFFALO

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## Project 3 : Classification Algorithms

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12/10/2016

## 1 K-NEAREST NEIGHBORS ALGORITHM

### 1.1 ALGORITHM DESCRIPTION

### 1.2 IMPLEMENTATION

### 1.3 RESULT EVALUATION

## 2 DECISION TREE

### 2.1 ALGORITHM DESCRIPTION

### 2.2 IMPLEMENTATION

### 2.3 RESULT EVALUATION

## 3 DECISION TREE WITH RANDOM FOREST

### 3.1 ALGORITHM DESCRIPTION

### 3.2 IMPLEMENTATION

### 3.3 RESULT EVALUATION

## 4 DECISION TREE WITH BOOSTING

### 4.1 ALGORITHM DESCRIPTION

### 4.2 IMPLEMENTATION

### 4.3 RESULT EVALUATION

## 5 NAIVE BAYES

### 5.1 ALGORITHM DESCRIPTION

### 5.2 IMPLEMENTATION

### 5.3 RESULT EVALUATION

## REFERENCES

- [1] Ng, Andrew Y., Michael I. Jordan, and Yair Weiss. "On spectral clustering: Analysis and an algorithm." Advances in neural information processing systems 2 (2002): 849-856.