

## Predicting Discrete Values Debates 2/16/2024

### 1 Should use Decision Tree Classification

Naïve Bayes 83

Decision tree classification 75, 66, 77,

A limitation of time not overall value

Increased by 11 point today

95% accuracy (how)

Hyper focus on why you shouldn't use K-Nearest Neighbors

- How would you even classify data
- How far away is a 'Warrant Arrest' from 'Grand Theft Auto'

### 1 Shouldn't use Decision Tree Classification

### 2 Should/Shouldn't use K-Nearest Neighbors

K-Nearest neighbors: Place each data point on a graph then place new neighbors as the most common near number

K is the number of votes counted to define what data each point belongs to

Choose each K value then figure out its accuracy then add 1 to the K value and do it again.

Take the highest K accuracy value.

Numerical data is best for K-Nearest Neighbors

### 3 Should/Shouldn't use Naive Bayes

Naïve Bayes: Breaks up text into component then identify how often each component appears