

Machine Learning

Logistic Regression

| | <u>Given Label</u> | <u>Predicted Label</u> |
|---------------|--------------------|------------------------|
| 2 b) | | |
| (155, 40, 35) | Woman | Woman |
| | | Man |
| (170, 70, 32) | Man | |
| | | Man |
| (175, 70, 35) | Woman | |
| | | Man |
| (180, 90, 20) | Man | |

- Logistic Regression classifier is an excellent predictor for dichotomous label data. ^{also assumes}
- Naive Bayes treats the data as (iid) independent and the given data labels ~~as~~ have no relation to each other.
- ~~not~~ With very large data sets, (as the sigmoid function reaches infinity), the logistic regression model performs much better than Naive Bayes