Classification results

Classes used:

'Business & Finance',

'Health Care',

'Science & Health',

'Politics & Policy',

'Criminal Justice'

Outputs:

Decision Tree:

precision recall f1-score support

Business & Finance 0.53 0.49 0.51 93

Criminal Justice 0.52 0.46 0.49 74

Health Care 0.51 0.53 0.52 51

Politics & Policy 0.64 0.62 0.63 240

Science & Health 0.54 0.61 0.57 136

avg / total 0.57 0.57 0.57 594

Random Forest:

precision recall f1-score support

Business & Finance 0.55 0.43 0.48 93

Criminal Justice 0.57 0.39 0.46 74

Health Care 0.48 0.61 0.53 51

Politics & Policy 0.66 0.63 0.65 240

Science & Health 0.51 0.65 0.57 136

avg / total 0.58 0.57 0.57 594

Naïve Bayes:

precision recall f1-score support

Business & Finance 0.58 0.60 0.59 93

Criminal Justice 0.55 0.54 0.54 74

Health Care 0.45 0.65 0.53 51

Politics & Policy 0.71 0.67 0.69 240

Science & Health 0.66 0.61 0.63 136

avg / total 0.64 0.63 0.63 594

Support Vector Classification:

precision recall f1-score support

Business & Finance 0.23 0.92 0.37 93

Criminal Justice 1.00 0.12 0.22 74

Health Care 0.57 0.31 0.41 51

Politics & Policy 0.88 0.25 0.39 240

Science & Health 0.57 0.51 0.53 136

avg / total 0.70 0.41 0.40 594

Perceptron Network:

precision recall f1-score support

Business & Finance 0.52 0.54 0.53 93

Criminal Justice 0.60 0.43 0.50 74

Health Care 0.50 0.59 0.54 51

Politics & Policy 0.66 0.71 0.69 240

Science & Health 0.64 0.60 0.62 136

avg / total 0.61 0.61 0.61 594