Tarea 2

Minería de Datos

Alumno: Pablo Lluch

No 07630425

KNN 5

|  |  |  |
| --- | --- | --- |
| Precision | Recall | Fscore |
| 0.85 | 0.94 | 0.89 |
| 0.35 | 0.13 | 0.19 |
| 0.42 | 0.11 | 0.16 |
| 0.2 | 0.2 | 0.2 |
| 0.41 | 0.32 | 0.36 |
| 0.33 | 0.12 | 0.18 |
| 0.58 | 0.47 | 0.52 |
| 0.88 | 0.82 | 0.85 |

KNN 8

|  |  |  |
| --- | --- | --- |
| Precision | Recall | Fscore |
| 0.84 | 0.95 | 0.89 |
| 0.3 | 0.1 | 0.14 |
| 0.47 | 0.11 | 0.17 |
| 0.26 | 0.22 | 0.24 |
| 0.44 | 0.36 | 0.39 |
| 0.4 | 0.12 | 0.18 |
| 0.6 | 0.44 | 0.51 |
| 0.89 | 0.81 | 0.85 |

KNN 15

|  |  |  |
| --- | --- | --- |
| Precision | Recall | Fscore |
| 0.84 | 0.95 | 0.89 |
| 0.35 | 0.12 | 0.17 |
| 0.43 | 0.07 | 0.12 |
| 0.26 | 0.19 | 0.21 |
| 0.45 | 0.36 | 0.4 |
| 0.37 | 0.1 | 0.16 |
| 0.62 | 0.48 | 0.54 |
| 0.86 | 0.8 | 0.83 |

Decision Trees

|  |  |  |
| --- | --- | --- |
| Precision | Recall | Fscore |
| 1.0 | 1.0 | 1.0 |
| 1.0 | 0.98 | 0.99 |
| 0.99 | 0.99 | 0.99 |
| 0.98 | 0.98 | 0.97 |
| 1.0 | 1.0 | 1.0 |
| 1.0 | 1.0 | 1.0 |
| 1.0 | 1.0 | 1.0 |
| 1.0 | 1.0 | 1.0 |

Naive Bayes

|  |  |  |
| --- | --- | --- |
| Precision | Recall | Fscore |
| 1.0 | 1.0 | 1.0 |
| 1.0 | 0.97 | 0.98 |
| 1.0 | 1.0 | 1.0 |
| 1.0 | 1.0 | 1.0 |
| 1.0 | 1.0 | 1.0 |
| 1.0 | 1.0 | 1.0 |
| 1.0 | 1.0 | 1.0 |
| 1.0 | 1.0 | 1.0 |

Notamos que los clasificadores de árboles de decisión y Naive Bayes rindieron considerablemente mejor que las versiones de KNN, además de ejecutarse bastante más rápido. Esto nos indica principalmente que KNN debe ocuparse con medidas de distancia adecuadas, mientras que los demás algoritmos discriminan adecuadamente entre atributos más importantes.