Feature Descriptor: RLBP

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.586 | 0.573 | 0.573 | 0.571 | 0.573 | 0.573 | 0 |
| J48 binary tree | 0.626 | 0.611 | 0.611 | 0.614 | 0.614 | 0.61 | 0 |
| AODE | 0.854 | 0.786 | 0.786 | 0.788 | 0.788 | 0.786 | 0 |
| Bayes network | 0.87 | 0.809 | 0.809 | 0.81 | 0.809 | 0.809 | 0 |
| Naïve bay | 0.866 | 0.809 | 0.809 | 0.81 | 0.81 | 0.809 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.03 |
| Logistic | 0.691 | 0.664 | 0.664 | 0.662 | 0.664 | 0.664 | 0.02 |
| SMO | 0.715 | 0.718 | 0.718 | 0.713 | 0.719 | 0.716 | 0.02 |
| Muti layer | 0.815 | 0.748 | 0.748 | 0.744 | 0.749 | 0.747 | 14.94 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.577 | 0.542 | 0.542 | 0.539 | 0.541 | 0.542 | 0 |
| J48 binary tree | 0.451 | 0.45 | 0.45 | 0.449 | 0.45 | 0.45 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.33 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.48 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.577 | 0.542 | 0.542 | 0.539 | 0.541 | 0.542 | 0 |
| J48 binary tree | 0.451 | 0.45 | 0.45 | 0.449 | 0.45 | 0.45 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.33 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.48 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.577 | 0.542 | 0.542 | 0.539 | 0.541 | 0.542 | 0 |
| J48 binary tree | 0.451 | 0.45 | 0.45 | 0.449 | 0.45 | 0.45 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.33 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.48 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.577 | 0.542 | 0.542 | 0.539 | 0.541 | 0.542 | 0 |
| J48 binary tree | 0.451 | 0.45 | 0.45 | 0.449 | 0.45 | 0.45 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.33 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.48 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.577 | 0.542 | 0.542 | 0.539 | 0.541 | 0.542 | 0 |
| J48 binary tree | 0.451 | 0.45 | 0.45 | 0.449 | 0.45 | 0.45 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.33 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.48 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.577 | 0.542 | 0.542 | 0.539 | 0.541 | 0.542 | 0 |
| J48 binary tree | 0.451 | 0.45 | 0.45 | 0.449 | 0.45 | 0.45 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.33 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.48 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.572 | 0.542 | 0.542 | 0.539 | 0.541 | 0.542 | 0 |
| J48 binary tree | 0.451 | 0.427 | 0.427 | 0.424 | 0.426 | 0.427 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.24 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.51 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.19 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.572 | 0.542 | 0.542 | 0.539 | 0.541 | 0.542 | 0 |
| J48 binary tree | 0.451 | 0.427 | 0.427 | 0.424 | 0.426 | 0.427 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.24 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.51 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.19 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.572 | 0.542 | 0.542 | 0.539 | 0.541 | 0.542 | 0 |
| J48 binary tree | 0.451 | 0.427 | 0.427 | 0.424 | 0.426 | 0.427 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.24 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.51 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.19 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.572 | 0.542 | 0.542 | 0.539 | 0.541 | 0.542 | 0 |
| J48 binary tree | 0.451 | 0.427 | 0.427 | 0.424 | 0.426 | 0.427 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.24 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.51 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.19 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.572 | 0.542 | 0.542 | 0.539 | 0.541 | 0.542 | 0 |
| J48 binary tree | 0.451 | 0.427 | 0.427 | 0.424 | 0.426 | 0.427 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.24 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.36 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.19 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.572 | 0.542 | 0.542 | 0.539 | 0.541 | 0.542 | 0 |
| J48 binary tree | 0.451 | 0.427 | 0.427 | 0.424 | 0.426 | 0.427 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.24 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.51 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.19 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.588 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| J48 binary tree | 0.458 | 0.458 | 0.458 | 0.455 | 0.457 | 0.457 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.29 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.29 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.19 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.588 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| J48 binary tree | 0.458 | 0.458 | 0.458 | 0.455 | 0.457 | 0.457 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.29 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.29 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.588 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| J48 binary tree | 0.458 | 0.458 | 0.458 | 0.455 | 0.457 | 0.457 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.29 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.29 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.588 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| J48 binary tree | 0.458 | 0.458 | 0.458 | 0.455 | 0.457 | 0.457 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.29 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.29 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.588 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| J48 binary tree | 0.458 | 0.458 | 0.458 | 0.455 | 0.457 | 0.457 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.29 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.29 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.588 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| J48 binary tree | 0.458 | 0.458 | 0.458 | 0.455 | 0.457 | 0.457 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.29 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.29 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.601 | 0.557 | 0.557 | 0.556 | 0.557 | 0.557 | 0 |
| J48 binary tree | 0.448 | 0.443 | 0.443 | 0.445 | 0.444 | 0.442 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.29 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.42 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.601 | 0.557 | 0.557 | 0.556 | 0.557 | 0.557 | 0 |
| J48 binary tree | 0.448 | 0.443 | 0.443 | 0.445 | 0.444 | 0.442 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.29 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.42 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.601 | 0.557 | 0.557 | 0.556 | 0.557 | 0.557 | 0 |
| J48 binary tree | 0.448 | 0.443 | 0.443 | 0.445 | 0.444 | 0.442 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.29 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.42 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.601 | 0.557 | 0.557 | 0.556 | 0.557 | 0.557 | 0 |
| J48 binary tree | 0.448 | 0.443 | 0.443 | 0.445 | 0.444 | 0.442 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.29 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.42 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.601 | 0.557 | 0.557 | 0.556 | 0.557 | 0.557 | 0 |
| J48 binary tree | 0.448 | 0.443 | 0.443 | 0.445 | 0.444 | 0.442 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.29 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.42 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.601 | 0.557 | 0.557 | 0.556 | 0.557 | 0.557 | 0 |
| J48 binary tree | 0.448 | 0.443 | 0.443 | 0.445 | 0.444 | 0.442 | 0 |
| AODE | 0.517 | 0.489 | 0.489 | 0.49 | 0.49 | 0.489 | 0.29 |
| Bayes network | 0.535 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 0 |
| Naïve bay | 0.536 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.544 | 0.527 | 0.527 | 0.529 | 0.529 | 0.527 | 2.42 |
| SMO | 0.532 | 0.534 | 0.534 | 0.53 | 0.533 | 0.533 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |