Feature Descriptor: RLBP

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.609 | 0.634 | 0.634 | 0.638 | 0.639 | 0.633 | 0 |
| J48 binary tree | 0.627 | 0.634 | 0.634 | 0.637 | 0.637 | 0.633 | 0 |
| AODE | 0.876 | 0.779 | 0.779 | 0.775 | 0.78 | 0.778 | 0 |
| Bayes network | 0.878 | 0.786 | 0.786 | 0.784 | 0.786 | 0.786 | 0 |
| Naïve bay | 0.884 | 0.794 | 0.794 | 0.792 | 0.794 | 0.794 | 0 |
| SVM | 0.645 | 0.656 | 0.656 | 0.633 | 0.736 | 0.618 | 0.03 |
| Logistic | 0.677 | 0.611 | 0.611 | 0.614 | 0.614 | 0.61 | 0.27 |
| SMO | 0.741 | 0.74 | 0.74 | 0.741 | 0.741 | 0.741 | 0.02 |
| Muti layer | 0.815 | 0.725 | 0.725 | 0.723 | 0.725 | 0.725 | 20.95 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.516 | 0.534 | 0.534 | 0.536 | 0.536 | 0.534 | 0 |
| J48 binary tree | 0.573 | 0.534 | 0.534 | 0.537 | 0.537 | 0.534 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.37 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.6 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.516 | 0.534 | 0.534 | 0.536 | 0.536 | 0.534 | 0 |
| J48 binary tree | 0.573 | 0.534 | 0.534 | 0.537 | 0.537 | 0.534 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.37 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.6 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.516 | 0.534 | 0.534 | 0.536 | 0.536 | 0.534 | 0 |
| J48 binary tree | 0.573 | 0.534 | 0.534 | 0.537 | 0.537 | 0.534 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.37 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.6 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.516 | 0.534 | 0.534 | 0.536 | 0.536 | 0.534 | 0 |
| J48 binary tree | 0.573 | 0.534 | 0.534 | 0.537 | 0.537 | 0.534 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.37 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.48 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.516 | 0.534 | 0.534 | 0.536 | 0.536 | 0.534 | 0 |
| J48 binary tree | 0.573 | 0.534 | 0.534 | 0.537 | 0.537 | 0.534 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.37 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.6 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.516 | 0.534 | 0.534 | 0.536 | 0.536 | 0.534 | 0 |
| J48 binary tree | 0.573 | 0.534 | 0.534 | 0.537 | 0.537 | 0.534 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.37 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.6 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.493 | 0.511 | 0.511 | 0.511 | 0.512 | 0.12 | 0 |
| J48 binary tree | 0.585 | 0.595 | 0.595 | 0.598 | 0.598 | 0.595 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.37 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.53 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.493 | 0.511 | 0.511 | 0.511 | 0.512 | 0.12 | 0 |
| J48 binary tree | 0.585 | 0.595 | 0.595 | 0.598 | 0.598 | 0.595 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.37 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.53 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.493 | 0.511 | 0.511 | 0.511 | 0.512 | 0.12 | 0 |
| J48 binary tree | 0.585 | 0.595 | 0.595 | 0.598 | 0.598 | 0.595 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.37 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.53 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.493 | 0.511 | 0.511 | 0.511 | 0.512 | 0.12 | 0 |
| J48 binary tree | 0.585 | 0.595 | 0.595 | 0.598 | 0.598 | 0.595 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.37 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.53 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.493 | 0.511 | 0.511 | 0.511 | 0.512 | 0.12 | 0 |
| J48 binary tree | 0.585 | 0.595 | 0.595 | 0.598 | 0.598 | 0.595 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.37 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.53 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.493 | 0.511 | 0.511 | 0.511 | 0.512 | 0.12 | 0 |
| J48 binary tree | 0.585 | 0.595 | 0.595 | 0.598 | 0.598 | 0.595 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.53 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.504 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.568 | 0.527 | 0.527 | 0.53 | 0.529 | 0.526 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.49 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.504 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.568 | 0.527 | 0.527 | 0.53 | 0.529 | 0.526 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.49 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.504 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.568 | 0.527 | 0.527 | 0.53 | 0.529 | 0.526 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.49 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.504 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.568 | 0.527 | 0.527 | 0.53 | 0.529 | 0.526 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.49 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.504 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.568 | 0.527 | 0.527 | 0.53 | 0.529 | 0.526 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.49 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.504 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.568 | 0.527 | 0.527 | 0.53 | 0.529 | 0.526 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.49 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.509 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.569 | 0.565 | 0.565 | 0.565 | 0.566 | 0.565 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.49 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.509 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.569 | 0.565 | 0.565 | 0.565 | 0.566 | 0.565 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.49 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.509 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.569 | 0.565 | 0.565 | 0.565 | 0.566 | 0.565 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.49 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.509 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.569 | 0.565 | 0.565 | 0.565 | 0.566 | 0.565 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.49 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.509 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.569 | 0.565 | 0.565 | 0.565 | 0.566 | 0.565 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.49 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.509 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.569 | 0.565 | 0.565 | 0.565 | 0.566 | 0.565 | 0 |
| AODE | 0.554 | 0.534 | 0.534 | 0.532 | 0.534 | 0.534 | 0.15 |
| Bayes network | 0.567 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Naïve bay | 0.564 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.599 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 0.49 |
| SMO | 0.518 | 0.519 | 0.519 | 0.517 | 0.519 | 0.519 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |