Feature Descriptor: RLBP

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.547 | 0.557 | 0.557 | 0.555 | 0.557 | 0.557 | 0 |
| J48 binary tree | 0.597 | 0.588 | 0.588 | 0.584 | 0.58 | 0.587 | 0 |
| AODE | 0.861 | 0.756 | 0.756 | 0.759 | 0.759 | 0.756 | 0 |
| Bayes network | 0.873 | 0.763 | 0.763 | 0.767 | 0.767 | 0.763 | 0 |
| Naïve bay | 0.868 | 0.763 | 0.763 | 0.767 | 0.767 | 0.763 | 0 |
| SVM | 0.508 | 0.527 | 0.527 | 0.489 | 0.752 | 0.371 | 0.03 |
| Logistic | 0.841 | 0.771 | 0.771 | 0.773 | 0.773 | 0.771 | 0.25 |
| SMO | 0.771 | 0.771 | 0.771 | 0.771 | 0.772 | 0.771 | 0.02 |
| Muti layer | 0.851 | 0.748 | 0.748 | 0.748 | 0.748 | 0.748 | 29.71 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.642 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.15 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.72 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.642 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.27 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.21 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.69 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.21 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.642 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.15 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.72 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.642 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.15 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.72 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.642 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.14 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.72 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.642 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.15 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.72 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.62 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.15 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.23 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.48 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.62 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.17 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.15 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.48 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.62 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.15 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.23 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.48 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.62 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.15 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.23 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.48 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.62 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.15 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.23 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.48 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.62 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.15 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.23 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.48 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.09 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.661 | 0.626 | 0.626 | 0.628 | 0.628 | 0.626 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.34 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.18 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.71 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.08 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.661 | 0.626 | 0.626 | 0.628 | 0.628 | 0.626 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.11 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.18 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.71 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.08 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.661 | 0.626 | 0.626 | 0.628 | 0.628 | 0.626 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.34 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.18 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.71 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.08 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.661 | 0.626 | 0.626 | 0.628 | 0.628 | 0.626 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.34 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.18 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.71 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.08 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.661 | 0.626 | 0.626 | 0.628 | 0.628 | 0.626 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.34 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.18 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.71 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.08 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.507 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| J48 binary tree | 0.661 | 0.626 | 0.626 | 0.628 | 0.628 | 0.626 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.16 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.18 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.71 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.08 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.487 | 0.519 | 0.519 | 0.522 | 0.521 | 0.519 | 0 |
| J48 binary tree | 0.615 | 0.603 | 0.603 | 0.605 | 0.605 | 0.603 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.28 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.18 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.83 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.08 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.487 | 0.519 | 0.519 | 0.522 | 0.521 | 0.519 | 0 |
| J48 binary tree | 0.615 | 0.603 | 0.603 | 0.605 | 0.605 | 0.603 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.28 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.18 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.83 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.08 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.487 | 0.519 | 0.519 | 0.522 | 0.521 | 0.519 | 0 |
| J48 binary tree | 0.615 | 0.603 | 0.603 | 0.605 | 0.605 | 0.603 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.28 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.22 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.83 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.08 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.487 | 0.519 | 0.519 | 0.522 | 0.521 | 0.519 | 0 |
| J48 binary tree | 0.615 | 0.603 | 0.603 | 0.605 | 0.605 | 0.603 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.28 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.18 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.83 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.08 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.487 | 0.519 | 0.519 | 0.522 | 0.521 | 0.519 | 0 |
| J48 binary tree | 0.615 | 0.603 | 0.603 | 0.605 | 0.605 | 0.603 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.14 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.18 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.83 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.08 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.487 | 0.519 | 0.519 | 0.522 | 0.521 | 0.519 | 0 |
| J48 binary tree | 0.615 | 0.603 | 0.603 | 0.605 | 0.605 | 0.603 | 0 |
| AODE | 0.562 | 0.55 | 0.55 | 0.552 | 0.552 | 0.549 | 0.28 |
| Bayes network | 0.559 | 0.527 | 0.527 | 0.528 | 0.528 | 0.527 | 0 |
| Naïve bay | 0.55 | 0.55 | 0.55 | 0.55 | 0.551 | 0.55 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.18 |
| Logistic | 0.547 | 0.542 | 0.542 | 0.546 | 0.546 | 0.541 | 0.83 |
| SMO | 0.525 | 0.527 | 0.527 | 0.523 | 0.526 | 0.526 | 0.08 |
| Muti layer |  |  |  |  |  |  |  |