Feature Descriptor: LTP

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.589 | 0.603 | 0.603 | 0.6 | 0.603 | 0.602 | 0 |
| J48 binary tree | 0.728 | 0.74 | 0.74 | 0.736 | 0.742 | 0.739 | 0 |
| AODE | 0.778 | 0.733 | 0.733 | 0.736 | 0.737 | 0.733 | 0 |
| Bayes network | 0.794 | 0.756 | 0.756 | 0.76 | 0.761 | 0.755 | 0 |
| Naïve bay | 0.794 | 0.748 | 0.748 | 0.763 | 0.754 | 0.748 | 0 |
| SVM | 0.625 | 0.634 | 0.634 | 0.617 | 0.653 | 0.615 | 0 |
| Logistic | 0.669 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 0.03 |
| SMO | 0.724 | 0.725 | 0.725 | 0.723 | 0.725 | 0.725 | 0.03 |
| Muti layer | 0.795 | 0.725 | 0.725 | 0.72 | 0.727 | 0.724 | 9.2 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.583 | 0.58 | 0.58 | 0.583 | 0.583 | 0.58 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.698 | 0.608 | 0.602 | 0.05 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.595 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.635 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 7.62 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.583 | 0.58 | 0.58 | 0.583 | 0.583 | 0.58 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.698 | 0.608 | 0.602 | 0.05 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.595 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.635 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 7.62 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.583 | 0.58 | 0.58 | 0.583 | 0.583 | 0.58 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.698 | 0.608 | 0.602 | 0.05 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.595 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.635 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 7.62 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.583 | 0.58 | 0.58 | 0.583 | 0.583 | 0.58 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.698 | 0.608 | 0.602 | 0.05 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.595 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.635 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 7.62 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.583 | 0.58 | 0.58 | 0.583 | 0.583 | 0.58 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.698 | 0.608 | 0.602 | 0.05 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.595 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.635 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 7.62 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.583 | 0.58 | 0.58 | 0.583 | 0.583 | 0.58 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.698 | 0.608 | 0.602 | 0.05 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.595 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.635 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 7.62 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.618 | 0.611 | 0.611 | 0.614 | 0.614 | 0.61 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.635 | 0.588 | 0.588 | 0.588 | 0.588 | 0.588 | 5.91 |
| SMO | 0.686 | 0.687 | 0.687 | 0.686 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.618 | 0.611 | 0.611 | 0.614 | 0.614 | 0.61 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.635 | 0.588 | 0.588 | 0.588 | 0.588 | 0.588 | 5.91 |
| SMO | 0.686 | 0.687 | 0.687 | 0.686 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.618 | 0.611 | 0.611 | 0.614 | 0.614 | 0.61 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.635 | 0.588 | 0.588 | 0.588 | 0.588 | 0.588 | 5.91 |
| SMO | 0.686 | 0.687 | 0.687 | 0.686 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.618 | 0.611 | 0.611 | 0.614 | 0.614 | 0.61 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.635 | 0.588 | 0.588 | 0.588 | 0.588 | 0.588 | 5.91 |
| SMO | 0.686 | 0.687 | 0.687 | 0.686 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.618 | 0.611 | 0.611 | 0.614 | 0.614 | 0.61 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.635 | 0.588 | 0.588 | 0.588 | 0.588 | 0.588 | 5.91 |
| SMO | 0.686 | 0.687 | 0.687 | 0.686 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.618 | 0.611 | 0.611 | 0.614 | 0.614 | 0.61 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.635 | 0.588 | 0.588 | 0.588 | 0.588 | 0.588 | 5.57 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.613 | 0.595 | 0.595 | 0.597 | 0.597 | 0.595 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.635 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 6.17 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.613 | 0.595 | 0.595 | 0.597 | 0.597 | 0.595 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.635 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 6.17 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.613 | 0.595 | 0.595 | 0.597 | 0.597 | 0.595 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.635 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 6.17 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.613 | 0.595 | 0.595 | 0.597 | 0.597 | 0.595 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.635 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 6.17 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.613 | 0.595 | 0.595 | 0.597 | 0.597 | 0.595 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.635 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 6.17 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.482 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.613 | 0.595 | 0.595 | 0.597 | 0.597 | 0.595 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.635 | 0.595 | 0.595 | 0.596 | 0.596 | 0.596 | 6.17 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.488 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.571 | 0.588 | 0.588 | 0.59 | 0.59 | 0.588 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.637 | 0.588 | 0.588 | 0.588 | 0.588 | 0.588 | 6.8 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.488 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.571 | 0.588 | 0.588 | 0.59 | 0.59 | 0.588 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.637 | 0.588 | 0.588 | 0.588 | 0.588 | 0.588 | 6.8 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.488 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.571 | 0.588 | 0.588 | 0.59 | 0.59 | 0.588 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.637 | 0.588 | 0.588 | 0.588 | 0.588 | 0.588 | 6.8 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.488 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.571 | 0.588 | 0.588 | 0.59 | 0.59 | 0.588 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.637 | 0.588 | 0.588 | 0.588 | 0.588 | 0.588 | 6.8 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.488 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.571 | 0.588 | 0.588 | 0.59 | 0.59 | 0.588 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.637 | 0.588 | 0.588 | 0.588 | 0.588 | 0.588 | 6.8 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.488 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 0 |
| J48 binary tree | 0.571 | 0.588 | 0.588 | 0.59 | 0.59 | 0.588 | 0 |
| AODE | 0.653 | 0.603 | 0.603 | 0.608 | 0.608 | 0.602 | 0 |
| Bayes network | 0.625 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| Naïve bay | 0.63 | 0.588 | 0.588 | 0.595 | 0.595 | 0.585 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.05 |
| Logistic | 0.637 | 0.588 | 0.588 | 0.588 | 0.588 | 0.588 | 6.8 |
| SMO | 0.686 | 0.687 | 0.687 | 0.684 | 0.687 | 0.687 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |