Feature Descriptor: LCP

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.538 | 0.55 | 0.55 | 0.554 | 0.553 | 0.549 | 0 |
| J48 binary tree | 0.6 | 0.588 | 0.588 | 0.591 | 0.591 | 0.587 | 0 |
| AODE | 0.71 | 0.634 | 0.634 | 0.637 | 0.637 | 0.633 | 0 |
| Bayes network | 0.746 | 0.679 | 0.679 | 0.687 | 0.691 | 0.677 | 0 |
| Naïve bay | 0.748 | 0.687 | 0.687 | 0.695 | 0.7 | 0.684 | 0 |
| SVM | 0.548 | 0.565 | 0.565 | 0.532 | 0.704 | 0.459 | 0 |
| Logistic | 0.512 | 0.504 | 0.504 | 0.505 | 0.505 | 0.504 | 0.19 |
| SMO | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0 |
| Muti layer | 0.664 | 0.58 | 0.58 | 0.581 | 0.581 | 0.58 | 17.44 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.546 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| J48 binary tree | 0.556 | 0.55 | 0.55 | 0.549 | 0.55 | 0.55 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.18 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.9 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.546 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| J48 binary tree | 0.556 | 0.55 | 0.55 | 0.549 | 0.55 | 0.55 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.18 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.86 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.546 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| J48 binary tree | 0.556 | 0.55 | 0.55 | 0.549 | 0.55 | 0.55 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.18 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.9 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.546 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| J48 binary tree | 0.556 | 0.55 | 0.55 | 0.549 | 0.55 | 0.55 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.18 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.9 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.546 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| J48 binary tree | 0.556 | 0.55 | 0.55 | 0.549 | 0.55 | 0.55 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.18 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.9 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.546 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| J48 binary tree | 0.556 | 0.55 | 0.55 | 0.549 | 0.55 | 0.55 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.18 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.9 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.553 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.563 | 0.565 | 0.565 | 0.562 | 0.564 | 0.564 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.618 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.03 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.94 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.07 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.553 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.563 | 0.565 | 0.565 | 0.562 | 0.564 | 0.564 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.618 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.03 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.85 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.07 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.553 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.563 | 0.565 | 0.565 | 0.562 | 0.564 | 0.564 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.618 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.03 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.94 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.07 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.553 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.563 | 0.565 | 0.565 | 0.562 | 0.564 | 0.564 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.618 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.03 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.94 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.07 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.553 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.563 | 0.565 | 0.565 | 0.562 | 0.564 | 0.564 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.618 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.03 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.89 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.07 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.553 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.563 | 0.565 | 0.565 | 0.562 | 0.564 | 0.564 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.618 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.03 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.84 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.07 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.546 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| J48 binary tree | 0.561 | 0.557 | 0.557 | 0.555 | 0.557 | 0.557 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.02 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.93 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.546 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| J48 binary tree | 0.561 | 0.557 | 0.557 | 0.555 | 0.557 | 0.557 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.02 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.91 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.546 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| J48 binary tree | 0.561 | 0.557 | 0.557 | 0.555 | 0.557 | 0.557 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.02 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.93 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.546 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| J48 binary tree | 0.561 | 0.557 | 0.557 | 0.555 | 0.557 | 0.557 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.02 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.93 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.546 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| J48 binary tree | 0.561 | 0.557 | 0.557 | 0.555 | 0.557 | 0.557 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.02 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.93 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.546 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| J48 binary tree | 0.561 | 0.557 | 0.557 | 0.555 | 0.557 | 0.557 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.02 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.93 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.559 | 0.519 | 0.519 | 0.519 | 0.519 | 0.519 | 0 |
| J48 binary tree | 0.497 | 0.511 | 0.511 | 0.507 | 0.51 | 0.51 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0.03 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.85 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.559 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.497 | 0.511 | 0.511 | 0.507 | 0.51 | 0.51 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0.03 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.83 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.559 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.497 | 0.511 | 0.511 | 0.507 | 0.51 | 0.51 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0.03 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.85 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.559 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.497 | 0.511 | 0.511 | 0.507 | 0.51 | 0.51 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0.03 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.85 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.559 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.497 | 0.511 | 0.511 | 0.507 | 0.51 | 0.51 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0.03 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.85 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.559 | 0.519 | 0.519 | 0.519 | 0.52 | 0.519 | 0 |
| J48 binary tree | 0.497 | 0.511 | 0.511 | 0.507 | 0.51 | 0.51 | 0 |
| AODE | 0.595 | 0.611 | 0.611 | 0.61 | 0.611 | 0.611 | 0.03 |
| Bayes network | 0.669 | 0.641 | 0.641 | 0.643 | 0.643 | 0.641 | 0 |
| Naïve bay | 0.669 | 0.618 | 0.618 | 0.621 | 0.621 | 0.618 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.506 | 0.519 | 0.519 | 0.515 | 0.518 | 0.518 | 0.85 |
| SMO | 0.501 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |