Feature Descriptor: LBP

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.646 | 0.618 | 0.618 | 0.617 | 0.618 | 0.618 | 0 |
| J48 binary tree | 0.766 | 0.718 | 0.718 | 0.721 | 0.721 | 0.717 | 0 |
| AODE | 0.861 | 0.809 | 0.809 | 0.809 | 0.809 | 0.809 | 0 |
| Bayes network | 0.878 | 0.809 | 0.808 | 0.809 | 0.809 | 0.809 | 0 |
| Naïve bay | 0.867 | 0.817 | 0.817 | 0.816 | 0.817 | 0.817 | 0 |
| SVM | 0.516 | 0.534 | 0.534 | 0.497 | 0.755 | 0.388 | 0 |
| Logistic | 0.676 | 0.626 | 0.626 | 0.627 | 0.627 | 0.626 | 0 |
| SMO | 0.702 | 0.702 | 0.701 | 0.702 | 0.702 | 0.702 | 0 |
| Muti layer | 0.778 | 0.695 | 0.695 | 0.696 | 0.696 | 0.695 | 16.19 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.577 | 0.565 | 0.565 | 0.561 | 0.564 | 0.564 | 0 |
| J48 binary tree | 0.631 | 0.626 | 0.626 | 0.624 | 0.626 | 0.626 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.14 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.22 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.12 |
| SMO | 0.534 | 0.534 | 0.534 | 0.5340.535 | 0.534 | 0.534 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.577 | 0.565 | 0.565 | 0.561 | 0.564 | 0.564 | 0 |
| J48 binary tree | 0.631 | 0.626 | 0.626 | 0.624 | 0.626 | 0.626 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.14 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.13 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.19 |
| SMO | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.534 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.577 | 0.565 | 0.565 | 0.561 | 0.564 | 0.564 | 0 |
| J48 binary tree | 0.631 | 0.626 | 0.626 | 0.624 | 0.626 | 0.626 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.14 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.22 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.12 |
| SMO | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.534 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.577 | 0.565 | 0.565 | 0.561 | 0.564 | 0.564 | 0 |
| J48 binary tree | 0.631 | 0.626 | 0.626 | 0.624 | 0.626 | 0.626 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.14 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.22 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.12 |
| SMO | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.534 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.577 | 0.565 | 0.565 | 0.561 | 0.564 | 0.564 | 0 |
| J48 binary tree | 0.631 | 0.626 | 0.626 | 0.624 | 0.626 | 0.626 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.14 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.22 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.12 |
| SMO | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.534 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.577 | 0.565 | 0.565 | 0.561 | 0.564 | 0.564 | 0 |
| J48 binary tree | 0.631 | 0.626 | 0.626 | 0.624 | 0.626 | 0.626 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.14 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.22 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.12 |
| SMO | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.534 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.578 | 0.565 | 0.565 | 0.561 | 0.564 | 0.564 | 0 |
| J48 binary tree | 0.595 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.16 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.11 |
| SMO | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.534 | 0.07 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.578 | 0.565 | 0.565 | 0.561 | 0.564 | 0.564 | 0 |
| J48 binary tree | 0.595 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.16 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.11 |
| SMO | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.534 | 0.07 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.578 | 0.565 | 0.565 | 0.561 | 0.564 | 0.564 | 0 |
| J48 binary tree | 0.595 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.16 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.2 |
| SMO | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.534 | 0.07 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.578 | 0.565 | 0.565 | 0.561 | 0.564 | 0.564 | 0 |
| J48 binary tree | 0.595 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.16 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.11 |
| SMO | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.534 | 0.07 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.578 | 0.565 | 0.565 | 0.561 | 0.564 | 0.564 | 0 |
| J48 binary tree | 0.595 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.16 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.12 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.2 |
| SMO | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.534 | 0.07 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.578 | 0.565 | 0.565 | 0.561 | 0.564 | 0.564 | 0 |
| J48 binary tree | 0.595 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.18 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.13 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.32 |
| SMO | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.534 | 0.07 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.567 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| J48 binary tree | 0.611 | 0.611 | 0.611 | 0.608 | 0.61 | 0.61 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.18 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.01 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.12 |
| SMO | 0.534 | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.567 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| J48 binary tree | 0.611 | 0.611 | 0.611 | 0.608 | 0.61 | 0.61 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.18 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.01 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.12 |
| SMO | 0.534 | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.567 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| J48 binary tree | 0.611 | 0.611 | 0.611 | 0.608 | 0.61 | 0.61 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.18 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.01 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.12 |
| SMO | 0.534 | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.567 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| J48 binary tree | 0.611 | 0.611 | 0.611 | 0.608 | 0.61 | 0.61 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.18 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.01 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.12 |
| SMO | 0.534 | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.567 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| J48 binary tree | 0.611 | 0.611 | 0.611 | 0.608 | 0.61 | 0.61 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.18 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.01 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.12 |
| SMO | 0.534 | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.567 | 0.557 | 0.557 | 0.554 | 0.556 | 0.556 | 0 |
| J48 binary tree | 0.611 | 0.611 | 0.611 | 0.608 | 0.61 | 0.61 | 0 |
| AODE | 0.621 | 0.611 | 0.611 | 0.612 | 0.612 | 0.611 | 0.18 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.14 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.34 |
| SMO | 0.534 | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.06 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.562 | 0.557 | 0.557 | 0.552 | 0.556 | 0.556 | 0 |
| J48 binary tree | 0.584 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| AODE |  |  |  |  |  |  | 0.23 |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.34 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.22 |
| SMO | 0.534 | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.562 | 0.557 | 0.557 | 0.552 | 0.556 | 0.556 | 0 |
| J48 binary tree | 0.584 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| AODE |  |  |  |  |  |  |  |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.34 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.22 |
| SMO | 0.534 | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.562 | 0.557 | 0.557 | 0.552 | 0.556 | 0.556 | 0 |
| J48 binary tree | 0.584 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| AODE |  |  |  |  |  |  |  |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.34 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.22 |
| SMO | 0.534 | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.562 | 0.557 | 0.557 | 0.552 | 0.556 | 0.556 | 0 |
| J48 binary tree | 0.584 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| AODE |  |  |  |  |  |  |  |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.34 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.22 |
| SMO | 0.534 | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.562 | 0.557 | 0.557 | 0.552 | 0.556 | 0.556 | 0 |
| J48 binary tree | 0.584 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| AODE |  |  |  |  |  |  |  |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.34 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.22 |
| SMO | 0.534 | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.562 | 0.557 | 0.557 | 0.552 | 0.556 | 0.556 | 0 |
| J48 binary tree | 0.584 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| AODE |  |  |  |  |  |  |  |
| Bayes network | 0.607 | 0.573 | 0.573 | 0.575 | 0.575 | 0.572 | 0 |
| Naïve bay | 0.601 | 0.58 | 0.58 | 0.582 | 0.582 | 0.58 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.491 | 0.269 | 0.355 | 0.17 |
| Logistic | 0.579 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 3.22 |
| SMO | 0.534 | 0.534 | 0.534 | 0.534 | 0.535 | 0.534 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |