Feature Descriptor: GLCM

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.7 | 0.725 | 0.725 | 0.727 | 0.727 | 0.725 | 0 |
| J48 binary tree | 0.61 | 0.588 | 0.588 | 0.58 | 0.588 | 0.583 | 0 |
| AODE | 0.728 | 0.656 | 0.656 | 0.655 | 0.656 | 0.656 | 0 |
| Bayes network | 0.757 | 0.695 | 0.695 | 0.69 | 0.695 | 0.693 | 0 |
| Naïve bay | 0.756 | 0.702 | 0.702 | 0.697 | 0.703 | 0.701 | 0 |
| SVM | 0.704 | 0.71 | 0.71 | 0.699 | 0.724 | 0.703 | 0 |
| Logistic | 0.708 | 0.649 | 0.649 | 0.645 | 0.649 | 0.648 | 0 |
| SMO | 0.678 | 0.679 | 0.679 | 0.677 | 0.679 | 0.679 | 0 |
| Muti layer | 0.673 | 0.641 | 0.641 | 0.64 | 0.641 | 0.641 | 0.61 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.671 | 0.679 | 0.679 | 0.676 | 0.679 | 0.679 | 0 |
| J48 binary tree | 0.529 | 0.542 | 0.542 | 0.53 | 0.54 | 0.531 | 0 |
| AODE | 0.67 | 0.626 | 0.626 | 0.62 | 0.626 | 0.623 | 0 |
| Bayes network | 0.698 | 0.656 | 0.656 | 0.651 | 0.657 | 0.655 | 0 |
| Naïve bay | 0.699 | 0.679 | 0.679 | 0.674 | 0.681 | 0.677 | 0 |
| SVM | 0.558 | 0.573 | 0.573 | 0.544 | 0.626 | 0.504 | 0 |
| Logistic | 0.649 | 0.618 | 0.618 | 0.618 | 0.618 | 0.618 | 0 |
| SMO | 0.67 | 0.672 | 0.672 | 0.669 | 0.672 | 0.671 | 0 |
| Muti layer | 0.665 | 0.626 | 0.626 | 0.627 | 0.627 | 0.626 | 2.08 |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.671 | 0.679 | 0.679 | 0.676 | 0.679 | 0.679 | 0 |
| J48 binary tree | 0.529 | 0.542 | 0.542 | 0.53 | 0.54 | 0.531 | 0 |
| AODE | 0.67 | 0.626 | 0.626 | 0.62 | 0.626 | 0.623 | 0 |
| Bayes network | 0.698 | 0.656 | 0.656 | 0.651 | 0.657 | 0.655 | 0 |
| Naïve bay | 0.699 | 0.679 | 0.679 | 0.674 | 0.681 | 0.677 | 0 |
| SVM | 0.558 | 0.573 | 0.573 | 0.544 | 0.626 | 0.504 | 0 |
| Logistic | 0.649 | 0.618 | 0.618 | 0.618 | 0.618 | 0.618 | 0 |
| SMO | 0.67 | 0.672 | 0.672 | 0.669 | 0.672 | 0.671 | 0 |
| Muti layer | 0.665 | 0.588 | 0.588 | 0.591 | 0.591 | 0.587 | 2.12 |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.671 | 0.679 | 0.679 | 0.676 | 0.679 | 0.679 | 0 |
| J48 binary tree | 0.529 | 0.542 | 0.542 | 0.53 | 0.54 | 0.531 | 0 |
| AODE | 0.67 | 0.626 | 0.626 | 0.62 | 0.626 | 0.623 | 0 |
| Bayes network | 0.698 | 0.656 | 0.656 | 0.651 | 0.657 | 0.655 | 0 |
| Naïve bay | 0.699 | 0.679 | 0.679 | 0.674 | 0.681 | 0.677 | 0 |
| SVM | 0.558 | 0.573 | 0.573 | 0.544 | 0.626 | 0.504 | 0 |
| Logistic | 0.649 | 0.618 | 0.618 | 0.618 | 0.618 | 0.618 | 0 |
| SMO | 0.67 | 0.672 | 0.672 | 0.669 | 0.672 | 0.671 | 0 |
| Muti layer | 0.665 | 0.626 | 0.626 | 0.627 | 0.627 | 0.626 | 2.09 |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.671 | 0.679 | 0.679 | 0.676 | 0.679 | 0.679 | 0 |
| J48 binary tree | 0.529 | 0.542 | 0.542 | 0.53 | 0.54 | 0.531 | 0 |
| AODE | 0.67 | 0.626 | 0.626 | 0.62 | 0.626 | 0.623 | 0 |
| Bayes network | 0.698 | 0.656 | 0.656 | 0.651 | 0.657 | 0.655 | 0 |
| Naïve bay | 0.699 | 0.679 | 0.679 | 0.674 | 0.681 | 0.677 | 0 |
| SVM | 0.558 | 0.573 | 0.573 | 0.544 | 0.626 | 0.504 | 0 |
| Logistic | 0.649 | 0.618 | 0.618 | 0.618 | 0.618 | 0.618 | 0 |
| SMO | 0.67 | 0.672 | 0.672 | 0.669 | 0.672 | 0.671 | 0 |
| Muti layer | 0.652 | 0.611 | 0.611 | 0.611 | 0.611 | 0.611 | 2.07 |