Feature Descriptor: GLCM

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.599 | 0.573 | 0.573 | 0.568 | 0.572 | 0.571 | 0 |
| J48 binary tree | 0.542 | 0.527 | 0.527 | 0.521 | 0.525 | 0.524 | 0 |
| AODE | 0.591 | 0.573 | 0.573 | 0.569 | 0.572 | 0.572 | 0 |
| Bayes network | 0.673 | 0.634 | 0.634 | 0.663 | 0.634 | 0.634 | 0 |
| Naïve bay | 0.669 | 0.634 | 0.634 | 0.663 | 0.634 | 0.634 | 0 |
| SVM | 0.553 | 0.557 | 0.557 | 0.548 | 0.556 | 0.55 | 0 |
| Logistic | 0.572 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 0 |
| SMO | 0.615 | 0.618 | 0.618 | 0.611 | 0.619 | 0.615 | 0 |
| Muti layer | 0.547 | 0.527 | 0.527 | 0.527 | 0.527 | 0.527 | 0.62 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.608 | 0.611 | 0.611 | 0.605 | 0.61 | 0.609 | 0 |
| J48 binary tree | 0.546 | 0.55 | 0.55 | 0.537 | 0.549 | 0.537 | 0 |
| AODE | 0.6 | 0.557 | 0.557 | 0.547 | 0.556 | 0.548 | 0 |
| Bayes network | 0.66 | 0.603 | 0.603 | 0.596 | 0.603 | 0.6 | 0 |
| Naïve bay | 0.657 | 0.618 | 0.618 | 0.611 | 0.619 | 0.615 | 0 |
| SVM | 0.517 | 0.527 | 0.527 | 0.508 | 0.523 | 0.496 | 0 |
| Logistic | 0.505 | 0.496 | 0.496 | 0.49 | 0.494 | 0.493 | 0 |
| SMO | 0.577 | 0.58 | 0.58 | 0.575 | 0.579 | 0.578 | 0 |
| Muti layer | 0.514 | 0.504 | 0.504 | 0.504 | 0.505 | 0.504 | 1.96 |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.608 | 0.611 | 0.611 | 0.605 | 0.61 | 0.609 | 0 |
| J48 binary tree | 0.546 | 0.55 | 0.55 | 0.537 | 0.549 | 0.537 | 0 |
| AODE | 0.6 | 0.557 | 0.557 | 0.547 | 0.556 | 0.548 | 0 |
| Bayes network | 0.66 | 0.603 | 0.603 | 0.596 | 0.603 | 0.6 | 0 |
| Naïve bay | 0.657 | 0.618 | 0.618 | 0.611 | 0.619 | 0.615 | 0 |
| SVM | 0.517 | 0.527 | 0.527 | 0.508 | 0.523 | 0.496 | 0 |
| Logistic | 0.505 | 0.496 | 0.496 | 0.49 | 0.494 | 0.493 | 0 |
| SMO | 0.577 | 0.58 | 0.58 | 0.575 | 0.579 | 0.578 | 0 |
| Muti layer | 0.552 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 1.91 |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.608 | 0.611 | 0.611 | 0.605 | 0.61 | 0.609 | 0 |
| J48 binary tree | 0.546 | 0.55 | 0.55 | 0.537 | 0.549 | 0.537 | 0 |
| AODE | 0.6 | 0.557 | 0.557 | 0.547 | 0.556 | 0.548 | 0 |
| Bayes network | 0.66 | 0.603 | 0.603 | 0.596 | 0.603 | 0.6 | 0 |
| Naïve bay | 0.657 | 0.618 | 0.618 | 0.611 | 0.619 | 0.615 | 0 |
| SVM | 0.517 | 0.527 | 0.527 | 0.508 | 0.523 | 0.496 | 0 |
| Logistic | 0.505 | 0.496 | 0.496 | 0.49 | 0.494 | 0.493 | 0 |
| SMO | 0.577 | 0.58 | 0.58 | 0.575 | 0.579 | 0.578 | 0 |
| Muti layer | 0.552 | 0.542 | 0.542 | 0.542 | 0.543 | 0.542 | 1.93 |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.608 | 0.611 | 0.611 | 0.605 | 0.61 | 0.609 | 0 |
| J48 binary tree | 0.53 | 0.504 | 0.504 | 0.498 | 0.502 | 0.501 | 0 |
| AODE | 0.6 | 0.557 | 0.557 | 0.547 | 0.556 | 0.548 | 0 |
| Bayes network | 0.66 | 0.603 | 0.603 | 0.596 | 0.603 | 0.6 | 0 |
| Naïve bay | 0.657 | 0.618 | 0.618 | 0.611 | 0.619 | 0.615 | 0 |
| SVM | 0.517 | 0.527 | 0.527 | 0.508 | 0.523 | 0.496 | 0 |
| Logistic | 0.505 | 0.496 | 0.496 | 0.49 | 0.494 | 0.493 | 0 |
| SMO | 0.577 | 0.58 | 0.58 | 0.575 | 0.579 | 0.578 | 0 |
| Muti layer | 0.532 | 0.489 | 0.489 | 0.488 | 0.489 | 0.489 | 1.77 |