Feature Descriptor: GLCM

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.57 | 0.626 | 0.626 | 0.625 | 0.626 | 0.626 | 0 |
| J48 binary tree | 0.556 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.564 | 0.626 | 0.626 | 0.625 | 0.626 | 0.626 | 0 |
| Bayes network | 0.568 | 0.626 | 0.626 | 0.625 | 0.626 | 0.626 | 0 |
| Naïve bay | 0.564 | 0.626 | 0.626 | 0.625 | 0.626 | 0.626 | 0 |
| SVM | 0.617 | 0.618 | 0.618 | 0.616 | 0.618 | 0.618 | 0 |
| Logistic | 0.582 | 0.626 | 0.626 | 0.625 | 0.626 | 0.626 | 0 |
| SMO | 0.626 | 0.626 | 0.626 | 0.625 | 0.626 | 0.626 | 0 |
| Muti layer | 0.597 | 0.626 | 0.626 | 0.625 | 0.626 | 0.626 | 0.19 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.521 | 0.588 | 0.588 | 0.584 | 0.587 | 0.587 | 0 |
| J48 binary tree | 0.466 | 0.473 | 0.473 | 0.47 | 0.472 | 0.473 | 0 |
| AODE | 0.437 | 0.435 | 0.435 | 0.433 | 0.435 | 0.435 | 0 |
| Bayes network | 0.498 | 0.519 | 0.519 | 0.522 | 0.521 | 0.519 | 0 |
| Naïve bay | 0.493 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| SVM | 0.494 | 0.511 | 0.511 | 0.476 | 0.46 | 0.37 | 0 |
| Logistic | 0.58 | 0.573 | 0.573 | 0.569 | 0.572 | 0.572 | 0 |
| SMO | 0.523 | 0.527 | 0.527 | 0.52 | 0.525 | 0.523 | 0 |
| Muti layer | 0.447 | 0.473 | 0.473 | 0.466 | 0.47 | 0.469 | 1.82 |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.521 | 0.588 | 0.588 | 0.584 | 0.587 | 0.587 | 0 |
| J48 binary tree | 0.492 | 0.481 | 0.481 | 0.477 | 0.48 | 0.48 | 0 |
| AODE | 0.437 | 0.435 | 0.435 | 0.433 | 0.435 | 0.435 | 0 |
| Bayes network | 0.498 | 0.519 | 0.519 | 0.522 | 0.521 | 0.519 | 0 |
| Naïve bay | 0.493 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| SVM | 0.494 | 0.511 | 0.511 | 0.476 | 0.46 | 0.37 | 0 |
| Logistic | 0.58 | 0.573 | 0.573 | 0.569 | 0.572 | 0.572 | 0 |
| SMO | 0.524 | 0.527 | 0.527 | 0.52 | 0.525 | 0.525 | 0 |
| Muti layer | 0.47 | 0.496 | 0.496 | 0.491 | 0.494 | 0.494 | 1.94 |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.521 | 0.588 | 0.588 | 0.584 | 0.587 | 0.587 | 0 |
| J48 binary tree | 0.467 | 0.473 | 0.473 | 0.47 | 0.472 | 0.473 | 0 |
| AODE | 0.437 | 0.435 | 0.435 | 0.433 | 0.435 | 0.435 | 0 |
| Bayes network | 0.498 | 0.519 | 0.519 | 0.522 | 0.521 | 0.519 | 0 |
| Naïve bay | 0.493 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| SVM | 0.494 | 0.511 | 0.511 | 0.476 | 0.46 | 0.376 | 0 |
| Logistic | 0.58 | 0.573 | 0.573 | 0.569 | 0.572 | 0.572 | 0 |
| SMO | 0.517 | 0.519 | 0.519 | 0.515 | 0.518 | 0.513 | 0 |
| Muti layer | 0.442 | 0.481 | 0.481 | 0.476 | 0.479 | 0.479 | 1.99 |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.521 | 0.588 | 0.588 | 0.584 | 0.587 | 0.587 | 0 |
| J48 binary tree | 0.492 | 0.481 | 0.481 | 0.478 | 0.48 | 0.48 | 0 |
| AODE | 0.437 | 0.435 | 0.435 | 0.433 | 0.435 | 0.435 | 0 |
| Bayes network | 0.498 | 0.519 | 0.519 | 0.522 | 0.521 | 0.519 | 0 |
| Naïve bay | 0.493 | 0.527 | 0.527 | 0.531 | 0.53 | 0.525 | 0 |
| SVM | 0.494 | 0.511 | 0.511 | 0.476 | 0.46 | 0.376 | 0 |
| Logistic | 0.58 | 0.573 | 0.573 | 0.569 | 0.572 | 0.572 | 0 |
| SMO | 0.524 | 0.527 | 0.527 | 0.422 | 0.525 | 0.525 | 0 |
| Muti layer | 0.485 | 0.496 | 0.496 | 0.492 | 0.495 | 0.495 | 1.78 |