Feature Descriptor: GLCM

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.486 | 0.466 | 0.466 | 0.462 | 0.464 | 0.465 | 0 |
| J48 binary tree | 0.495 | 0.496 | 0.496 | 0.49 | 0.494 | 0.493 | 0 |
| AODE | 0.528 | 0.55 | 0.55 | 0.547 | 0.549 | 0.549 | 0 |
| Bayes network | 0.502 | 0.542 | 0.542 | 0.541 | 0.542 | 0.542 | 0 |
| Naïve bay | 0.497 | 0.527 | 0.527 | 0.525 | 0.527 | 0.527 | 0 |
| SVM | 0.504 | 0.519 | 0.519 | 0.488 | 0.511 | 0.421 | 0 |
| Logistic | 0.513 | 0.573 | 0.573 | 0.579 | 0.572 | 0.572 | 0 |
| SMO | 0.528 | 0.527 | 0.527 | 0.528 | 0.529 | 0.527 | 0 |
| Muti layer | 0.496 | 0.489 | 0.489 | 0.491 | 0.491 | 0.488 | 0.59 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.503 | 0.504 | 0.504 | 0.501 | 0.503 | 0.503 | 0 |
| J48 binary tree | 0.437 | 0.458 | 0.458 | 0.458 | 0.459 | 0.458 | 0 |
| AODE | 0.407 | 0.443 | 0.443 | 0.441 | 0.442 | 0.443 | 0 |
| Bayes network | 0.393 | 0.42 | 0.42 | 0.42 | 0.421 | 0.42 | 0 |
| Naïve bay | 0.388 | 0.427 | 0.427 | 0.428 | 0.428 | 0.428 | 0 |
| SVM | 0.493 | 0.511 | 0.511 | 0.474 | 0.268 | 0.351 | 0 |
| Logistic | 0.458 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| SMO | 0.488 | 0.489 | 0.489 | 0.488 | 0.489 | 0.489 | 0 |
| Muti layer | 0.419 | 0.504 | 0.504 | 0.508 | 0.507 | 0.503 | 1.95 |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.503 | 0.504 | 0.504 | 0.501 | 0.503 | 0.503 | 0 |
| J48 binary tree | 0.437 | 0.458 | 0.458 | 0.458 | 0.459 | 0.458 | 0 |
| AODE | 0.407 | 0.443 | 0.443 | 0.441 | 0.442 | 0.443 | 0 |
| Bayes network | 0.393 | 0.42 | 0.42 | 0.42 | 0.421 | 0.42 | 0 |
| Naïve bay | 0.388 | 0.427 | 0.427 | 0.428 | 0.428 | 0.428 | 0 |
| SVM | 0.493 | 0.511 | 0.511 | 0.474 | 0.268 | 0.351 | 0 |
| Logistic | 0.458 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| SMO | 0.488 | 0.489 | 0.489 | 0.488 | 0.489 | 0.489 | 0 |
| Muti layer | 0.393 | 0.496 | 0.496 | 0.499 | 0.498 | 0.495 | 1.84 |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.503 | 0.504 | 0.504 | 0.501 | 0.503 | 0.503 | 0 |
| J48 binary tree | 0.437 | 0.458 | 0.458 | 0.458 | 0.459 | 0.458 | 0 |
| AODE | 0.407 | 0.443 | 0.443 | 0.441 | 0.442 | 0.443 | 0 |
| Bayes network | 0.393 | 0.42 | 0.42 | 0.42 | 0.421 | 0.42 | 0 |
| Naïve bay | 0.388 | 0.427 | 0.427 | 0.428 | 0.428 | 0.428 | 0 |
| SVM | 0.493 | 0.511 | 0.511 | 0.474 | 0.268 | 0.351 | 0 |
| Logistic | 0.458 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| SMO | 0.488 | 0.489 | 0.489 | 0.488 | 0.489 | 0.489 | 0 |
| Muti layer | 0.419 | 0.504 | 0.504 | 0.508 | 0.507 | 0.503 | 1.96 |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.503 | 0.504 | 0.504 | 0.501 | 0.503 | 0.503 | 0 |
| J48 binary tree | 0.433 | 0.458 | 0.458 | 0.458 | 0.459 | 0.458 | 0 |
| AODE | 0.407 | 0.443 | 0.443 | 0.441 | 0.442 | 0.443 | 0 |
| Bayes network | 0.393 | 0.42 | 0.42 | 0.42 | 0.421 | 0.42 | 0 |
| Naïve bay | 0.388 | 0.427 | 0.427 | 0.428 | 0.428 | 0.428 | 0 |
| SVM | 0.493 | 0.511 | 0.511 | 0.474 | 0.268 | 0.351 | 0 |
| Logistic | 0.458 | 0.511 | 0.511 | 0.512 | 0.513 | 0.512 | 0 |
| SMO | 0.488 | 0.489 | 0.489 | 0.488 | 0.489 | 0.489 | 0 |
| Muti layer | 0.407 | 0.481 | 0.481 | 0.483 | 0.483 | 0.481 | 1.99 |