Feature Descriptor: Gabor

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.445 | 0.427 | 0.427 | 0.428 | 0.428 | 0.428 | 0 |
| J48 binary tree | 0.581 | 0.565 | 0.565 | 0.564 | 0.565 | 0.565 | 0 |
| AODE | 0.765 | 0.702 | 0.702 | 0.714 | 0.729 | 0.696 | 0 |
| Bayes network | 0.809 | 0.74 | 0.74 | 0.749 | 0.758 | 0.738 | 0 |
| Naïve bay | 0.802 | 0.725 | 0.725 | 0.735 | 0.746 | 0.721 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0 |
| Logistic | 0.79 | 0.702 | 0.702 | 0.702 | 0.702 | 0.702 | 0.22 |
| SMO | 0.733 | 0.733 | 0.733 | 0.733 | 0.733 | 0.733 | 0.05 |
| Muti layer | 0.774 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 20.59 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.428 | 0.45 | 0.45 | 0.453 | 0.452 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.04 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.429 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 12.16 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.428 | 0.45 | 0.45 | 0.453 | 0.452 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.09 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.11 |
| Logistic | 0.429 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 13.27 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.428 | 0.45 | 0.45 | 0.453 | 0.452 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.04 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.429 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 12.16 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.428 | 0.45 | 0.45 | 0.453 | 0.452 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.04 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.429 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 12.16 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.428 | 0.45 | 0.45 | 0.453 | 0.452 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.04 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.429 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 12.16 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.428 | 0.45 | 0.45 | 0.453 | 0.452 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.04 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.429 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 11.66 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.431 | 0.45 | 0.45 | 0.452 | 0.452 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.04 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.431 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 12.82 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.431 | 0.45 | 0.45 | 0.452 | 0.452 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.06 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.1 |
| Logistic | 0.431 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 12.41 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.431 | 0.45 | 0.45 | 0.452 | 0.452 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.04 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.431 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 12.82 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.431 | 0.45 | 0.45 | 0.452 | 0.452 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.04 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.431 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 12.82 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.431 | 0.45 | 0.45 | 0.452 | 0.452 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.04 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.431 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 12.82 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.431 | 0.45 | 0.45 | 0.452 | 0.452 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.04 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.431 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 11.47 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.37 | 0.397 | 0.397 | 0.4 | 0.398 | 0.396 | 0 |
| J48 binary tree | 0.441 | 0.458 | 0.458 | 0.462 | 0.46 | 0.457 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.06 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.13 |
| Logistic | 0.428 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 13.71 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.22 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.37 | 0.397 | 0.397 | 0.4 | 0.398 | 0.396 | 0 |
| J48 binary tree | 0.441 | 0.458 | 0.458 | 0.462 | 0.46 | 0.457 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.07 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.13 |
| Logistic | 0.428 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 13.32 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.22 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.37 | 0.397 | 0.397 | 0.4 | 0.398 | 0.396 | 0 |
| J48 binary tree | 0.441 | 0.458 | 0.458 | 0.462 | 0.46 | 0.457 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.06 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.13 |
| Logistic | 0.428 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 13.71 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.22 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.37 | 0.397 | 0.397 | 0.4 | 0.398 | 0.396 | 0 |
| J48 binary tree | 0.441 | 0.458 | 0.458 | 0.462 | 0.46 | 0.457 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.06 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.13 |
| Logistic | 0.428 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 13.71 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.22 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.37 | 0.397 | 0.397 | 0.4 | 0.398 | 0.396 | 0 |
| J48 binary tree | 0.441 | 0.458 | 0.458 | 0.462 | 0.46 | 0.457 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.06 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.13 |
| Logistic | 0.428 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 13.71 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.22 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.37 | 0.397 | 0.397 | 0.4 | 0.398 | 0.396 | 0 |
| J48 binary tree | 0.441 | 0.458 | 0.458 | 0.462 | 0.46 | 0.457 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.06 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.13 |
| Logistic | 0.428 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 13.71 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.22 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.451 | 0.45 | 0.45 | 0.448 | 0.45 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.06 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.43 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 11.76 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.22 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.451 | 0.45 | 0.45 | 0.448 | 0.45 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.06 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.43 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 11.76 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.22 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.451 | 0.45 | 0.45 | 0.448 | 0.45 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.06 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.43 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 11.76 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.22 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.451 | 0.45 | 0.45 | 0.448 | 0.45 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.06 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.43 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 11.09 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.22 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.451 | 0.45 | 0.45 | 0.448 | 0.45 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.06 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.43 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 11.76 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.22 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.366 | 0.389 | 0.389 | 0.392 | 0.391 | 0.388 | 0 |
| J48 binary tree | 0.451 | 0.45 | 0.45 | 0.448 | 0.45 | 0.45 | 0 |
| AODE | 0.506 | 0.489 | 0.489 | 0.5 | 0.495 | 0.476 | 0.06 |
| Bayes network | 0.54 | 0.58 | 0.58 | 0.502 | 0.597 | 0.57 | 0 |
| Naïve bay | 0.537 | 0.588 | 0.588 | 0.602 | 0.611 | 0.574 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.43 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 11.76 |
| SMO | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.466 | 0.22 |
| Muti layer |  |  |  |  |  |  |  |