Feature Descriptor: Gabor

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.537 | 0.534 | 0.534 | 0.537 | 0.537 | 0.534 | 0 |
| J48 binary tree | 0.587 | 0.603 | 0.603 | 0.602 | 0.603 | 0.603 | 0 |
| AODE | 0.814 | 0.71 | 0.71 | 0.717 | 0.722 | 0.708 | 0 |
| Bayes network | 0.834 | 0.74 | 0.74 | 0.744 | 0.745 | 0.74 | 0 |
| Naïve bay | 0.83 | 0.74 | 0.74 | 0.744 | 0.745 | 0.74 | 0 |
| SVM | 0.605 | 0.618 | 0.618 | 0.592 | 0.706 | 0.563 | 0 |
| Logistic | 0.739 | 0.679 | 0.679 | 0.68 | 0.68 | 0.68 | 0.22 |
| SMO | 0.703 | 0.702 | 0.702 | 0.704 | 0.704 | 0.702 | 0.05 |
| Muti layer | 0.777 | 0.695 | 0.695 | 0.695 | 0.695 | 0.695 | 6.28 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.437 | 0.458 | 0.458 | 0.463 | 0.46 | 0.456 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.88 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.437 | 0.458 | 0.458 | 0.463 | 0.46 | 0.456 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.88 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.437 | 0.458 | 0.458 | 0.463 | 0.46 | 0.456 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.88 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.437 | 0.458 | 0.458 | 0.463 | 0.46 | 0.456 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.88 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.437 | 0.458 | 0.458 | 0.463 | 0.46 | 0.456 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.88 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.437 | 0.458 | 0.458 | 0.463 | 0.46 | 0.456 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.81 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.43 | 0.466 | 0.466 | 0.469 | 0.468 | 0.465 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.95 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.43 | 0.466 | 0.466 | 0.469 | 0.468 | 0.465 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.95 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.43 | 0.466 | 0.466 | 0.469 | 0.468 | 0.465 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.95 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.43 | 0.466 | 0.466 | 0.469 | 0.468 | 0.465 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.95 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.43 | 0.466 | 0.466 | 0.469 | 0.468 | 0.465 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.95 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.43 | 0.466 | 0.466 | 0.469 | 0.468 | 0.465 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.84 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.449 | 0.473 | 0.473 | 0.478 | 0.476 | 0.471 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.84 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.449 | 0.473 | 0.473 | 0.478 | 0.476 | 0.471 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.84 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.449 | 0.473 | 0.473 | 0.478 | 0.476 | 0.471 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.84 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.449 | 0.473 | 0.473 | 0.478 | 0.476 | 0.471 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.84 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.449 | 0.473 | 0.473 | 0.478 | 0.476 | 0.471 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.84 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.41 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.449 | 0.473 | 0.473 | 0.478 | 0.476 | 0.471 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.84 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.406 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.431 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.95 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.406 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.431 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.95 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.406 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.431 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.95 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.406 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.431 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.95 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.406 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.431 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.95 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.406 | 0.427 | 0.427 | 0.425 | 0.427 | 0.427 | 0 |
| J48 binary tree | 0.431 | 0.458 | 0.458 | 0.459 | 0.459 | 0.458 | 0 |
| AODE | 0.493 | 0.519 | 0.519 | 0.531 | 0.529 | 0.507 | 0.04 |
| Bayes network | 0.53 | 0.534 | 0.534 | 0.535 | 0.535 | 0.535 | 0 |
| Naïve bay | 0.525 | 0.534 | 0.534 | 0.542 | 0.54 | 0.53 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.08 |
| Logistic | 0.451 | 0.489 | 0.489 | 0.489 | 0.489 | 0.489 | 1.95 |
| SMO | 0.503 | 0.504 | 0.504 | 0.502 | 0.504 | 0.504 | 0.05 |
| Muti layer |  |  |  |  |  |  |  |