Feature Descriptor: LCP

1. Feature Selection: CFS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.522 | 0.489 | 0.489 | 0.493 | 0.492 | 0.487 | 0 |
| J48 binary tree | 0.726 | 0.725 | 0.725 | 0.724 | 0.725 | 0.725 | 0 |
| AODE | 0.744 | 0.664 | 0.664 | 0.672 | 0.678 | 0.661 | 0 |
| Bayes network | 0.775 | 0.679 | 0.679 | 0.692 | 0.711 | 0.671 | 0 |
| Naïve bay | 0.77 | 0.679 | 0.679 | 0.694 | 0.717 | 0.717 | 0 |
| SVM | 0.653 | 0.656 | 0.656 | 0.65 | 0.658 | 0.654 | 0 |
| Logistic | 0.674 | 0.664 | 0.664 | 0.667 | 0.667 | 0.664 | 0 |
| SMO | 0.657 | 0.656 | 0.656 | 0.658 | 0.658 | 0.656 | 0 |
| Muti layer | 0.707 | 0.649 | 0.649 | 0.648 | 0.649 | 0.649 | 4.46 |

1. Feature Selection: Chi-Square

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.509 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.33 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.509 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.33 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.509 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.33 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.509 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.33 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.509 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.33 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.509 | 0.511 | 0.511 | 0.51 | 0.511 | 0.511 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.33 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Gain Ratio

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.517 | 0.504 | 0.504 | 0.501 | 0.503 | 0.503 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.33 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.517 | 0.504 | 0.504 | 0.501 | 0.503 | 0.503 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.33 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.517 | 0.504 | 0.504 | 0.501 | 0.503 | 0.503 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.33 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.517 | 0.504 | 0.504 | 0.501 | 0.503 | 0.503 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.33 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.517 | 0.504 | 0.504 | 0.501 | 0.503 | 0.503 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.33 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.517 | 0.504 | 0.504 | 0.501 | 0.503 | 0.503 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.33 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Information Gain

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.514 | 0.496 | 0.496 | 0.496 | 0.497 | 0.496 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.36 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.514 | 0.496 | 0.496 | 0.496 | 0.497 | 0.496 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.36 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.514 | 0.496 | 0.496 | 0.496 | 0.497 | 0.496 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.36 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.514 | 0.496 | 0.496 | 0.496 | 0.497 | 0.496 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.36 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.514 | 0.496 | 0.496 | 0.496 | 0.497 | 0.496 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.36 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.514 | 0.496 | 0.496 | 0.496 | 0.497 | 0.496 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.36 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

1. Feature Selection: Relief

K=10

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.543 | 0.543 | 0.543 | 0.532 | 0.534 | 0.534 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.36 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=20

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.543 | 0.543 | 0.543 | 0.532 | 0.534 | 0.534 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.36 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=30

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.543 | 0.543 | 0.543 | 0.532 | 0.534 | 0.534 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.36 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=40

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.543 | 0.543 | 0.543 | 0.532 | 0.534 | 0.534 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.36 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=50

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.543 | 0.543 | 0.543 | 0.532 | 0.534 | 0.534 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.36 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |

K=60

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | AUC | AC | SN | SP | PR | FM | TIME |
| J48 | 0.485 | 0.504 | 0.504 | 0.509 | 0.507 | 0.502 | 0 |
| J48 binary tree | 0.543 | 0.543 | 0.543 | 0.532 | 0.534 | 0.534 | 0 |
| AODE | 0.586 | 0.542 | 0.542 | 0.551 | 0.55 | 0.536 | 0 |
| Bayes network | 0.627 | 0.58 | 0.58 | 0.588 | 0.588 | 0.576 | 0 |
| Naïve bay | 0.619 | 0.58 | 0.58 | 0.589 | 0.59 | 0.575 | 0 |
| SVM | 0.5 | 0.519 | 0.519 | 0.481 | 0.269 | 0.355 | 0.04 |
| Logistic | 0.687 | 0.656 | 0.656 | 0.657 | 0.657 | 0.657 | 0.36 |
| SMO | 0.525 | 0.525 | 0.525 | 0.524 | 0.526 | 0.526 | 0.04 |
| Muti layer |  |  |  |  |  |  |  |