\*Data Processing 방법\*

1) Cleveland데이터

①V12: ‘?’의 내용을 ‘0’으로 바꿈

②V13: ‘?’의 내용을 ‘0’으로 바꿈

1) Cleveland데이터

① column ‘Sex’ : Fmale -> ‘0’ / Male -> ‘1’

②column’Obesity’와 ‘CRF’, ‘CVA’, ‘Airway’, ‘Atypical’, ‘Nonanginal’, ‘ExertionalCP’, ‘Low TH Ang’, ‘LVH’ , ‘Poor R Progression’ : N -> ‘0’ / Y -> ‘1’

③coulmn ‘BBB’ : N -> ’0’ / LBBB -> ‘1’ / RBBB -> ’2’

④column ‘VHD’ : N -> ‘0’ / mild -> ‘1’ / Moderate -> ‘2’ / Severe -> ‘3’

\*각각의 분류기법에 대해 이용한 패키지 이름

|  |  |  |  |
| --- | --- | --- | --- |
|  | classification방법 | Weka내에서의 package이름 | R필요여부 |
| 1 | C50 | - | 0  참고)<https://weka.8497.n7.nabble.com/C5-java-code-in-Weka-td33714.html> |
| 2 | EXTRA Trees | ExtraTree  (in Trees banner) | - |
| 3 | CDT-P | CDT  (in Trees banner) | - |
| 4 | CART | REPTree  (in Trees banner) | - |
| 5 | Random Tree | RandomTree  (in Trees ) | - |
| 6 | Forest-PA | ForestPA  (in Trees ) | - |
| 7 | Rotation Forest | RotationForest  (in meta banner) | - |
| 8 | Random Forest | RandomForest  (in Trees ) | - |
| 9 | GBM | - | 0 |
| 10 | XGBoost | - | 0 |
| 11 | Cforest | - | 0 |
| 12 | Adaboost | AdaboostM1  (in meta banner) | - |
| 13 | Deep Learning | Deeplearning4j package  (“Dl4jMlpClassfier” in functions banner) | -참고)<https://deeplearning.cms.waikato.ac.nz/> |
| 14 | MLP | \*\*\*\*???\*\*\* | - |
| 15 | GaussProcess | 실행이 안됨 | 참고)<http://weka.sourceforge.net/doc.dev/weka/classifiers/functions/GaussianProcesses.html> |
| 16 | GLMNET | - | 0 |
| 17 | k-NN | \*\*\*\*???\*\*\* | - |
| 18 | LIBLNEAR | LibLINEAR  (in functions) | - |
| 19 | LDA | LDA  (In functions) | - |
| 20 | MDA | QDA  (in functions) | - |
| 21 | NB | - | 0 |
| 22 | 1-R | OneR  (in Rules) | - |
| 23 | PART | PART  (in Rules) | - |
| 24 | SAEDNN | - | 0 |
| 25 | JRIP | JRip  (in Rules) | - |

\*MLP 혹은 MultiLayerperceptron중에 어느것을 해야할까요?

\*search결과

1. <https://www.google.com/search?q=MLP+weka&oq=MLP+weka&aqs=chrome..69i57j0l5.483471j1j4&sourceid=chrome&ie=UTF-8>
2. <https://weka.8497.n7.nabble.com/MLP-classifier-td35639.html>
3. <https://www.youtube.com/watch?v=1pzZUlyqyh0>

\*k-nn을 위한 weka기법==IBK인걸까요???

\*search결과

1) \*<1> 10CV에 각각 사용한 데이터 파일

|  |  |
| --- | --- |
| 사용한 데이터 파일 이름 | |
| processed.cleveland - 복사본 | Z-Alizadeh sani dataset - 수정본 |

\*<2> Hold out 80/100에 각각 사용한 데이터 파일

|  |  |
| --- | --- |
| 사용한 데이터 파일 이름 | |
| processed.cleveland - 복사본 | Z-Alizadeh sani dataset - 수정본 |

\*<3> RepCV: 5X2CV에 각각 사용한 데이터 파일

1) processed.cleveland

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| classification방법 | 1-trial | 2-trial | 3-trial | 4-trial | 5-trial | Average |
| 이용한 데이터 순서  (name which ordered of used Data file) | processed.cleveland - 복사본 - 복사본 (1) | processed.cleveland - 복사본 - 복사본 (2) | processed.cleveland - 복사본 - 복사본 (3) | processed.cleveland - 복사본 - 복사본 (4) | processed.cleveland - 복사본 - 복사본 (5) | - |
| C50 |  |  |  |  |  |  |
| EXTRA Trees |  |  |  |  |  |  |
| CDT-P |  |  |  |  |  |  |
| CART |  |  |  |  |  |  |
| Random Tree |  |  |  |  |  |  |
| Forest-PA |  |  |  |  |  |  |
| Rotation Forest |  |  |  |  |  |  |
| Random Forest |  |  |  |  |  |  |
| GBM |  |  |  |  |  |  |
| XGBoost |  |  |  |  |  |  |
| Cforest |  |  |  |  |  |  |
| Adaboost |  |  |  |  |  |  |
| Deep Learning |  |  |  |  |  |  |
| MLP |  |  |  |  |  |  |
| GaussProcess |  |  |  |  |  |  |
| GLMNET |  |  |  |  |  |  |
| k-NN |  |  |  |  |  |  |
| LIBLNEAR |  |  |  |  |  |  |
| LDA |  |  |  |  |  |  |
| MDA |  |  |  |  |  |  |
| NB |  |  |  |  |  |  |
| 1-R |  |  |  |  |  |  |
| PART |  |  |  |  |  |  |
| SAEDNN |  |  |  |  |  |  |
| JRIP |  |  |  |  |  |  |

2) Z-Alizadeh sani dataset

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| classification방법 | 1-trial | 2-trial | 3-trial | 4-trial | 5-trial | Average |
| 이용한 데이터 순서  (name which ordered of used Data file) | Z-Alizadeh sani dataset - 복사본 (1) | Z-Alizadeh sani dataset - 복사본 (2) | Z-Alizadeh sani dataset - 복사본 (3) | Z-Alizadeh sani dataset - 복사본 (4) | Z-Alizadeh sani dataset - 복사본 (5) | - |
| C50 |  |  |  |  |  |  |
| EXTRA Trees |  |  |  |  |  |  |
| CDT-P |  |  |  |  |  |  |
| CART |  |  |  |  |  |  |
| Random Tree |  |  |  |  |  |  |
| Forest-PA |  |  |  |  |  |  |
| Rotation Forest |  |  |  |  |  |  |
| Random Forest |  |  |  |  |  |  |
| GBM |  |  |  |  |  |  |
| XGBoost |  |  |  |  |  |  |
| Cforest |  |  |  |  |  |  |
| Adaboost |  |  |  |  |  |  |
| Deep Learning |  |  |  |  |  |  |
| MLP |  |  |  |  |  |  |
| GaussProcess |  |  |  |  |  |  |
| GLMNET |  |  |  |  |  |  |
| k-NN |  |  |  |  |  |  |
| LIBLNEAR |  |  |  |  |  |  |
| LDA |  |  |  |  |  |  |
| MDA |  |  |  |  |  |  |
| NB |  |  |  |  |  |  |
| 1-R |  |  |  |  |  |  |
| PART |  |  |  |  |  |  |
| SAEDNN |  |  |  |  |  |  |
| JRIP |  |  |  |  |  |  |