|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **6 DATA FILES WITH 25 ANOMALIES EACH** | | | |  |  |
|  |  |  |  |  |  |
|  | ***STATIC WITH MOST RECENT DATA USED FOR TRAINING*** | | | | |
|  | **T0 ON T1** | **T1 ON T2** | **T2 ON T3** | **T3 ON T4** | **T4 ON T5** |
| **TPR** | 0 | 0.68 | 0.28 | 0.44 | 0.44 |
| **TNR** | 0.872534143 | 0.46935725 | 0.848024316 | 0.894890511 | 0.844117647 |
| **FPR** | 0.127465857 | 0.53064275 | 0.151975684 | 0.105109489 | 0.155882353 |
| **FNR** | 0 | 0.32 | 0.72 | 0.56 | 0.56 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <50% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.52 | 0.28 | 0.72 | 0.44 |
| **TNR** | 0.872534143 | 0.874439462 | 0.861702128 | 0.909489051 | 0.935294118 |
| **FPR** | 0.127465857 | 0.125560538 | 0.138297872 | 0.090510949 | 0.064705882 |
| **FNR** | 0 | 0.48 | 0.72 | 0.28 | 0.56 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <33% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.76 | 0.48 | 0.92 | 1 |
| **TNR** | 0.836115326 | 0.753363229 | 0.671732523 | 0.732846715 | 0.833823529 |
| **FPR** | 0.163884674 | 0.246636771 | 0.328267477 | 0.267153285 | 0.166176471 |
| **FNR** | 0 | 0.24 | 0.52 | 0.08 | 0 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <25% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.84 | 0.64 | 0.92 | 1 |
| **TNR** | 0.783004552 | 0.656203288 | 0.56231003 | 0.632116788 | 0.744117647 |
| **FPR** | 0.216995448 | 0.343796712 | 0.43768997 | 0.367883212 | 0.255882353 |
| **FNR** | 0 | 0.16 | 0.36 | 0.08 | 0 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <10% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.84 | 0.64 | 0.92 | 1 |
| **TNR** | 0.725341426 | 0.633781764 | 0.516717325 | 0.527007299 | 0.669117647 |
| **FPR** | 0.274658574 | 0.366218236 | 0.483282675 | 0.472992701 | 0.330882353 |
| **FNR** | 0 | 0.16 | 0.36 | 0.08 | 0 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **6 DATA FILES WITH 50 ANOMALIES EACH** | | | |  |  |
|  |  |  |  |  |  |
|  | ***STATIC WITH MOST RECENT DATA USED FOR TRAINING*** | | | | |
|  | **T1 ON T2** | **T2 ON T3** | **T3 ON T4** | **T4 ON T5** | **T5 ON T6** |
| **TPR** | 0 | 0.54 | 0.36 | 0.26 | 0.22 |
| **TNR** | 0.872534143 | 0.46935725 | 0.848024316 | 0.875912409 | 0.838235294 |
| **FPR** | 0.127465857 | 0.53064275 | 0.151975684 | 0.124087591 | 0.161764706 |
| **FNR** | 0 | 0.46 | 0.64 | 0.74 | 0.78 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <50% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.4 | 0.36 | 0.42 | 0.26 |
| **TNR** | 0.872534143 | 0.874439462 | 0.861702128 | 0.908029197 | 0.935294118 |
| **FPR** | 0.127465857 | 0.125560538 | 0.138297872 | 0.091970803 | 0.064705882 |
| **FNR** | 0 | 0.6 | 0.64 | 0.58 | 0.74 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <33% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.62 | 0.62 | 0.5 | 0.52 |
| **TNR** | 0.836115326 | 0.753363229 | 0.676291793 | 0.731386861 | 0.833823529 |
| **FPR** | 0.163884674 | 0.246636771 | 0.323708207 | 0.268613139 | 0.166176471 |
| **FNR** | 0 | 0.38 | 0.52 | 0.5 | 0.48 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <25% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.7 | 0.72 | 0.6 | 0.64 |
| **TNR** | 0.783004552 | 0.656203288 | 0.565349544 | 0.623357664 | 0.748529412 |
| **FPR** | 0.216995448 | 0.343796712 | 0.434650456 | 0.376642336 | 0.251470588 |
| **FNR** | 0 | 0.3 | 0.28 | 0.4 | 0.36 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <10% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.76 | 0.72 | 0.6 | 0.7 |
| **TNR** | 0.725341426 | 0.633781764 | 0.516717325 | 0.519708029 | 0.676470588 |
| **FPR** | 0.274658574 | 0.366218236 | 0.483282675 | 0.480291971 | 0.323529412 |
| **FNR** | 0 | 0.24 | 0.28 | 0.4 | 0.3 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **6 DATA FILES WITH 75 ANOMALIES EACH** | | | |  |  |
|  |  |  |  |  |  |
|  | ***STATIC WITH MOST RECENT DATA USED FOR TRAINING*** | | | | |
|  | **T0 ON T1** | **T1 ON T2** | **T2 ON T3** | **T3 ON T4** | **T4 ON T5** |
| **TPR** | 0 | 0.813333333 | 0.626666667 | 0.64 | 0.68 |
| **TNR** | 0.684370258 | 0.243647235 | 0.510638298 | 0.579562044 | 0.341176471 |
| **FPR** | 0.315629742 | 0.756352765 | 0.489361702 | 0.420437956 | 0.658823529 |
| **FNR** | 0 | 0.186666667 | 0.373333333 | 0.36 | 0.32 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <50% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.32 | 0.226666667 | 0.173333333 | 0.173333333 |
| **TNR** | 0.863429439 | 0.840059791 | 0.834346505 | 0.909489051 | 0.927941176 |
| **FPR** | 0.136570561 | 0.159940209 | 0.165653495 | 0.090510949 | 0.072058824 |
| **FNR** | 0 | 0.68 | 0.773333333 | 0.826666667 | 0.826666667 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <33% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.48 | 0.493333333 | 0.493333333 | 0.613333333 |
| **TNR** | 0.820940819 | 0.702541106 | 0.667173252 | 0.738686131 | 0.819117647 |
| **FPR** | 0.179059181 | 0.297458894 | 0.332826748 | 0.261313869 | 0.180882353 |
| **FNR** | 0 | 0.52 | 0.506666667 | 0.506666667 | 0.386666667 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <25% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.626666667 | 0.64 | 0.613333333 | 0.666666667 |
| **TNR** | 0.75569044 | 0.596412556 | 0.506079027 | 0.635036496 | 0.730882353 |
| **FPR** | 0.24430956 | 0.403587444 | 0.493920973 | 0.364963504 | 0.269117647 |
| **FNR** | 0 | 0.373333333 | 0.36 | 0.386666667 | 0.333333333 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <10% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.626666667 | 0.64 | 0.706666667 | 0.72 |
| **TNR** | 0.684370258 | 0.594917788 | 0.463525836 | 0.545985401 | 0.658823529 |
| **FPR** | 0.315629742 | 0.405082212 | 0.536474164 | 0.454014599 | 0.341176471 |
| **FNR** | 0 | 0.373333333 | 0.36 | 0.293333333 | 0.28 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **6 DATA FILES WITH 100 ANOMALIES EACH** | | | |  |  |
|  |  |  |  |  |  |
|  | ***STATIC WITH MOST RECENT DATA USED FOR TRAINING*** | | | | |
|  | **T0 ON T1** | **T1 ON T2** | **T2 ON T3** | **T3 ON T4** | **T4 ON T5** |
| **TPR** | 0 | 0.49 | 0.28 | 0.23 | 0.19 |
| **TNR** | 0.863429439 | 0.481315396 | 0.79331307 | 0.900729927 | 0.6 |
| **FPR** | 0.136570561 | 0.518684604 | 0.20668693 | 0.099270073 | 0.4 |
| **FNR** | 0 | 0.51 | 0.72 | 0.77 | 0.81 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <50% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.32 | 0.24 | 0.18 | 0.15 |
| **TNR** | 0.863429439 | 0.840059791 | 0.819148936 | 0.896350365 | 0.925 |
| **FPR** | 0.136570561 | 0.159940209 | 0.180851064 | 0.103649635 | 0.075 |
| **FNR** | 0 | 0.68 | 0.76 | 0.82 | 0.85 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <33% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.47 | 0.46 | 0.64 | 0.58 |
| **TNR** | 0.820940819 | 0.702541106 | 0.656534954 | 0.728467153 | 0.817647059 |
| **FPR** | 0.179059181 | 0.297458894 | 0.343465046 | 0.271532847 | 0.182352941 |
| **FNR** | 0 | 0.53 | 0.54 | 0.36 | 0.42 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <25% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.64 | 0.65 | 0.67 | 0.65 |
| **TNR** | 0.75569044 | 0.596412556 | 0.495440729 | 0.627737226 | 0.741176471 |
| **FPR** | 0.24430956 | 0.403587444 | 0.504559271 | 0.372262774 | 0.258823529 |
| **FNR** | 0 | 0.36 | 0.35 | 0.33 | 0.35 |
|  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <10% DEVIATION)*** | | | |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** |
| **TPR** | 0 | 0.64 | 0.66 | 0.75 | 0.68 |
| **TNR** | 0.684370258 | 0.594917788 | 0.452887538 | 0.525547445 | 0.673529412 |
| **FPR** | 0.315629742 | 0.405082212 | 0.547112462 | 0.474452555 | 0.326470588 |
| **FNR** | 0 | 0.36 | 0.34 | 0.25 | 0.32 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **8 DATA FILES WITH NO CONCEPT DRIFT, 100 ANOMALIES IN FILE 5 AND 8** | | | | | |  |  |
|  |  |  |  |  |  |  |  |
|  | ***STATIC WITH MOST RECENT DATA USED FOR TRAINING*** | | | | |  |  |
|  | **T0 ON T1** | **T1 ON T2** | **T2 ON T3** | **T3 ON T4** | **T4 ON T5** | **T5 ON T6** | **T6 ON T7** |
| **TPR** | 0 | 0 | 0 | 0.91 | 0 | 0 | 0.914893617 |
| **TNR** | 0.581613508 | 0.628514056 | 0.662601626 | 0.708423326 | 0.622871046 | 0.681704261 | 0.63943662 |
| **FPR** | 0.418386492 | 0.371485944 | 0.337398374 | 0.291576674 | 0.377128954 | 0.318295739 | 0.36056338 |
| **FNR** | 0 | 0 | 0 | 0.09 | 0 | 0 | 0.085106383 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <50% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.6 | 0 | 0 | 0.64893617 |
| **TNR** | 0.581613508 | 0.771084337 | 0.81097561 | 0.872570194 | 0.807785888 | 0.847117794 | 0.769014085 |
| **FPR** | 0.418386492 | 0.228915663 | 0.18902439 | 0.127429806 | 0.192214112 | 0.152882206 | 0.230985915 |
| **FNR** | 0 | 0 | 0 | 0.4 | 0 | 0 | 0.35106383 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <33% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.89 | 0 | 0 | 0.893617021 |
| **TNR** | 0.377110694 | 0.403614458 | 0.518292683 | 0.516198704 | 0.462287105 | 0.501253133 | 0.338028169 |
| **FPR** | 0.622889306 | 0.596385542 | 0.481707317 | 0.483801296 | 0.537712895 | 0.498746867 | 0.661971831 |
| **FNR** | 0 | 0 | 0 | 0.11 | 0 | 0 | 0.106382979 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <25% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.93 | 0 | 0 | 0.936170213 |
| **TNR** | 0.324577861 | 0.361445783 | 0.37804878 | 0.421166307 | 0.369829684 | 0.395989975 | 0.261971831 |
| **FPR** | 0.675422139 | 0.638554217 | 0.62195122 | 0.578833693 | 0.630170316 | 0.604010025 | 0.738028169 |
| **FNR** | 0 | 0 | 0 | 0.07 | 0 | 0 | 0.063829787 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <10% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.93 | 0 | 0 | 0.936170213 |
| **TNR** | 0.324577861 | 0.34939759 | 0.37804878 | 0.354211663 | 0.362530414 | 0.350877193 | 0.247887324 |
| **FPR** | 0.675422139 | 0.65060241 | 0.62195122 | 0.645788337 | 0.637469586 | 0.649122807 | 0.752112676 |
| **FNR** | 0 | 0 | 0 | 0.07 | 0 | 0 | 0.063829787 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **8 DATA FILES WITH NO CONCEPT DRIFT, 10 ANOMALIES IN FILE 5, 100 IN FILE 8** | | | | | |  |  |
|  |  |  |  |  |  |  |  |
|  | ***STATIC WITH MOST RECENT DATA USED FOR TRAINING*** | | | | |  |  |
|  | **T0 ON T1** | **T1 ON T2** | **T2 ON T3** | **T3 ON T4** | **T4 ON T5** | **T5 ON T6** | **T6 ON T7** |
| **TPR** | 0 | 0 | 0 | 1 | 0 | 0 | 0.914893617 |
| **TNR** | 0.581613508 | 0.628514056 | 0.662601626 | 0.719298246 | 0.642335766 | 0.681704261 | 0.63943662 |
| **FPR** | 0.418386492 | 0.371485944 | 0.337398374 | 0.280701754 | 0.357664234 | 0.318295739 | 0.36056338 |
| **FNR** | 0 | 0 | 0 | 0 | 0 | 0 | 0.085106383 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <50% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.928571429 | 0 | 0 | 0.765957447 |
| **TNR** | 0.581613508 | 0.771084337 | 0.81097561 | 0.879385965 | 0.785888078 | 0.827067669 | 0.743661972 |
| **FPR** | 0.418386492 | 0.228915663 | 0.18902439 | 0.120614035 | 0.214111922 | 0.172932331 | 0.256338028 |
| **FNR** | 0 | 0 | 0 | 0.071428571 | 0 | 0 | 0.234042553 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <33% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 1 | 0 | 0 | 0.893617021 |
| **TNR** | 0.377110694 | 0.403614458 | 0.518292683 | 0.524122807 | 0.457420925 | 0.473684211 | 0.383098592 |
| **FPR** | 0.622889306 | 0.596385542 | 0.481707317 | 0.475877193 | 0.542579075 | 0.526315789 | 0.616901408 |
| **FNR** | 0 | 0 | 0 | 0 | 0 | 0 | 0.106382979 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <25% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 1 | 0 | 0 | 0.936170213 |
| **TNR** | 0.324577861 | 0.361445783 | 0.37804878 | 0.427631579 | 0.357664234 | 0.373433584 | 0.307042254 |
| **FPR** | 0.675422139 | 0.638554217 | 0.62195122 | 0.572368421 | 0.642335766 | 0.626566416 | 0.692957746 |
| **FNR** | 0 | 0 | 0 | 0 | 0 | 0 | 0.063829787 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <10% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 1 | 0 | 0 | 0.936170213 |
| **TNR** | 0.324577861 | 0.34939759 | 0.37804878 | 0.359649123 | 0.347931873 | 0.325814536 | 0.301408451 |
| **FPR** | 0.675422139 | 0.65060241 | 0.62195122 | 0.640350877 | 0.652068127 | 0.674185464 | 0.698591549 |
| **FNR** | 0 | 0 | 0 | 0 | 0 | 0 | 0.063829787 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **8 DATA FILES WITH CONCEPT DRIFT, 100 ANOMALIES IN FILE 5, 100 IN FILE 8** | | | | | |  |  |
|  |  |  |  |  |  |  |  |
|  | ***STATIC WITH MOST RECENT DATA USED FOR TRAINING*** | | | | |  |  |
|  | **T0 ON T1** | **T1 ON T2** | **T2 ON T3** | **T3 ON T4** | **T4 ON T5** | **T5 ON T6** | **T6 ON T7** |
| **TPR** | 0 | 0 | 0 | 1 | 0 | 0 | 0.861702128 |
| **TNR** | 0.574870912 | 0.560632689 | 0.634782609 | 0.705035971 | 0.656934307 | 0.653716216 | 0.686725664 |
| **FPR** | 0.425129088 | 0.439367311 | 0.365217391 | 0.294964029 | 0.343065693 | 0.346283784 | 0.313274336 |
| **FNR** | 0 | 0 | 0 | 0 | 0 | 0 | 0.138297872 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <50% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.62 | 0 | 0 | 0.659574468 |
| **TNR** | 0.574870912 | 0.713532513 | 0.79826087 | 0.863309353 | 0.826642336 | 0.778716216 | 0.817699115 |
| **FPR** | 0.425129088 | 0.286467487 | 0.20173913 | 0.136690647 | 0.173357664 | 0.221283784 | 0.182300885 |
| **FNR** | 0 | 0 | 0 | 0.38 | 0 | 0 | 0.340425532 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <33% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.89 | 0 | 0 | 0.861702128 |
| **TNR** | 0.361445783 | 0.397188049 | 0.490434783 | 0.557553957 | 0.450729927 | 0.467905405 | 0.50619469 |
| **FPR** | 0.638554217 | 0.602811951 | 0.509565217 | 0.442446043 | 0.549270073 | 0.532094595 | 0.49380531 |
| **FNR** | 0 | 0 | 0 | 0.11 | 0 | 0 | 0.138297872 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <25% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.62 | 0 | 0 | 0.882978723 |
| **TNR** | 0.313253012 | 0.360281195 | 0.387826087 | 0.451438849 | 0.355839416 | 0.337837838 | 0.414159292 |
| **FPR** | 0.686746988 | 0.639718805 | 0.612173913 | 0.548561151 | 0.644160584 | 0.662162162 | 0.585840708 |
| **FNR** | 0 | 0 | 0 | 0.38 | 0 | 0 | 0.117021277 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <10% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.62 | 0 | 0 | 0.882978723 |
| **TNR** | 0.313253012 | 0.34973638 | 0.382608696 | 0.392086331 | 0.344890511 | 0.29222973 | 0.37699115 |
| **FPR** | 0.686746988 | 0.65026362 | 0.617391304 | 0.607913669 | 0.655109489 | 0.70777027 | 0.62300885 |
| **FNR** | 0 | 0 | 0 | 0.38 | 0 | 0 | 0.117021277 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **8 DATA FILES WITH CONCEPT DRIFT, 10 ANOMALIES IN FILE 5, 100 IN FILE 8** | | | | | |  |  |
|  |  |  |  |  |  |  |  |
|  | ***STATIC WITH MOST RECENT DATA USED FOR TRAINING*** | | | | |  |  |
|  | **T0 ON T1** | **T1 ON T2** | **T2 ON T3** | **T3 ON T4** | **T4 ON T5** | **T5 ON T6** | **T6 ON T7** |
| **TPR** | 0 | 0 | 0 | 0.857142857 | 0 | 0 | 1 |
| **TNR** | 0.313253012 | 0.230228471 | 0.260869565 | 0.265938069 | 0.310218978 | 0.305743243 | 0.237168142 |
| **FPR** | 0.686746988 | 0.769771529 | 0.739130435 | 0.734061931 | 0.689781022 | 0.694256757 | 0.762831858 |
| **FNR** | 0 | 0 | 0 | 0.142857143 | 0 | 0 | 0 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <50% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.857142857 | 0 | 0 | 0.765957447 |
| **TNR** | 0.574870912 | 0.713532513 | 0.79826087 | 0.867030965 | 0.808394161 | 0.75 | 0.8 |
| **FPR** | 0.425129088 | 0.286467487 | 0.20173913 | 0.132969035 | 0.191605839 | 0.25 | 0.2 |
| **FNR** | 0 | 0 | 0 | 0.142857143 | 0 | 0 | 0.234042553 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <33% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 1 | 0 | 0 | 0.861702128 |
| **TNR** | 0.361445783 | 0.397188049 | 0.490434783 | 0.564663024 | 0.432481752 | 0.459459459 | 0.486725664 |
| **FPR** | 0.638554217 | 0.602811951 | 0.509565217 | 0.435336976 | 0.567518248 | 0.540540541 | 0.513274336 |
| **FNR** | 0 | 0 | 0 | 0.11 | 0 | 0 | 0.138297872 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <25% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 1 | 0 | 0 | 0.925531915 |
| **TNR** | 0.313253012 | 0.360281195 | 0.387826087 | 0.4571949 | 0.333941606 | 0.334459459 | 0.394690265 |
| **FPR** | 0.686746988 | 0.639718805 | 0.612173913 | 0.5428051 | 0.666058394 | 0.665540541 | 0.605309735 |
| **FNR** | 0 | 0 | 0 | 0.38 | 0 | 0 | 0.074468085 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <10% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 1 | 0 | 0 | 0.925531915 |
| **TNR** | 0.313253012 | 0.34973638 | 0.382608696 | 0.39708561 | 0.322992701 | 0.288851351 | 0.357522124 |
| **FPR** | 0.686746988 | 0.65026362 | 0.617391304 | 0.60291439 | 0.677007299 | 0.711148649 | 0.642477876 |
| **FNR** | 0 | 0 | 0 | 0.38 | 0 | 0 | 0.074468085 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **8 DATA FILES WITH CONCEPT DRIFT, 100 ANOMALIES IN FILE 5, 100 IN FILE 8, WITH ENHANCEMENTS** | | | | | |  |  |
|  |  |  |  |  |  |  |  |
|  | ***STATIC WITH MOST RECENT DATA USED FOR TRAINING*** | | | | |  |  |
|  | **T0 ON T1** | **T1 ON T2** | **T2 ON T3** | **T3 ON T4** | **T4 ON T5** | **T5 ON T6** | **T6 ON T7** |
| **TPR** | 0 | 0 | 0 | 1 | 0 | 0 | 0.861702128 |
| **TNR** | 0.574870912 | 0.560632689 | 0.634782609 | 0.705035971 | 0.656934307 | 0.653716216 | 0.686725664 |
| **FPR** | 0.425129088 | 0.439367311 | 0.365217391 | 0.294964029 | 0.343065693 | 0.346283784 | 0.313274336 |
| **FNR** | 0 | 0 | 0 | 0 | 0 | 0 | 0.138297872 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <50% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.62 | 0 | 0 | 0.755319148 |
| **TNR** | 0.574870912 | 0.713532513 | 0.79826087 | 0.863309353 | 0.812043795 | 0.763513513 | 0.729203539 |
| **FPR** | 0.425129088 | 0.286467487 | 0.20173913 | 0.136690647 | 0.187956204 | 0.236486486 | 0.270796460 |
| **FNR** | 0 | 0 | 0 | 0.38 | 0 | 0 | 0.244680851 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <33% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.89 | 0 | 0 | 0. 92553191 |
| **TNR** | 0.361445783 | 0.397188049 | 0.490434783 | 0.557553957 | 0.394160583 | 0.503378378 | 0. 47964601 |
| **FPR** | 0.638554217 | 0.602811951 | 0.509565217 | 0.442446043 | 0.605839416 | 0.496621621 | 0. 52035398 |
| **FNR** | 0 | 0 | 0 | 0.11 | 0 | 0 | 0. 07446808 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <25% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.91 | 0 | 0 | 0.946808510 |
| **TNR** | 0.313253012 | 0.360281195 | 0.387826087 | 0.451438849 | 0. 30109489 | 0.36317567 | 0.362831858 |
| **FPR** | 0.686746988 | 0.639718805 | 0.612173913 | 0.548561151 | 0.644160584 | 0.63682432 | 0.637168141 |
| **FNR** | 0 | 0 | 0 | 0.09 | 0 | 0 | 0.053191489 |
|  |  |  |  |  |  |  |  |
|  | ***DYNAMIC WITH MATCHING ( <10% DEVIATION)*** | | | |  |  |  |
|  | **T1** | **T2** | **T3** | **T4** | **T5** | **T6** | **T7** |
| **TPR** | 0 | 0 | 0 | 0.91 | 0 | 0 | 0.946808510 |
| **TNR** | 0.313253012 | 0.34973638 | 0.382608696 | 0.392086331 | 0.293795620 | 0.307432432 | 0.34513274 |
| **FPR** | 0.686746988 | 0.65026362 | 0.617391304 | 0.607913669 | 0.706204379 | 0.692567567 | 0.65486725 |
| **FNR** | 0 | 0 | 0 | 0.09 | 0 | 0 | 0.053191489 |