File - tuning

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C:\Users\Jorawar\.virtualenvs\CMPT459-project\Scripts\python.exe -i C:/Users/Jorawar/Desktop/projects/CMPT459/covid-data-mining/src/parameter_tuning.py C:\Users\Jorawar\Desktop\projects\CMPT459\covid-data-mining\data\Merged_Data_Sets.csv
== Starting Execution ==
Encoding data ...
 **Time: apply_scheme took 0:00:00.553000
 **Time: impute_by_mean took 0:00:02.296000
Running ADA Grid Search ...
 -Trying: n_estimators=25, learning_rate=0.5
  --Cross validated mean accuracy: 0.9904314669877583
  --Training 'deceased' recall=0.8337081926671805 | macro recall 0.9510300501090976 | micro recall 0.9904314669877583
 -Trying: n_estimators=25, learning_rate=1.25
  --Cross validated mean accuracy: 0.9904234396949629
  --Training 'deceased' recall=0.8316943191157226 | macro recall 0.9505539243138217 | micro recall 0.9904234396949629
 -Trying: n_estimators=25, learning_rate=2.0
  --Cross validated mean accuracy: 0.9904180881664325
  --Training 'deceased' recall=0.8314710562018561 | macro recall 0.9505101453548402 | micro recall 0.9904180881664325
 -Trying: n_estimators=46, learning_rate=0.5
  --Cross validated mean accuracy: 0.9904635761589405
  --Training 'deceased' recall=0.8337084931556245 | macro recall 0.9510180531648812 | micro recall 0.9904635761589405
 -Trying: n_estimators=46, learning_rate=1.25
  --Cross validated mean accuracy: 0.990313733360091
  --Training 'deceased' recall=0.83348538048598 | macro recall 0.9509359468079709 | micro recall 0.990313733360091
 -Trying: n_estimators=46, learning_rate=2.0
  --Cross validated mean accuracy: 0.9904234396949628
  --Training 'deceased' recall=0.8296801450758208 | macro recall 0.9500862896876799 | micro recall 0.9904234396949628
 -Trying: n_estimators=86, learning_rate=0.5
  --Cross validated mean accuracy: 0.9904073851093719
  --Training 'deceased' recall=0.8307993142853709 | macro recall 0.9502565624537422 | micro recall 0.9904073851093719
 -Trying: n_estimators=86, learning_rate=1.25
  --Cross validated mean accuracy: 0.9903752759381899
  --Training 'deceased' recall=0.8312459903573259 | macro recall 0.9503855569092708 | micro recall 0.9903752759381899
 -Trying: n_estimators=86, learning_rate=2.0
  --Cross validated mean accuracy: 0.9904180881664325
  --Training 'deceased' recall=0.8316946196041667 | macro recall 0.9505028470772179 | micro recall 0.9904180881664325
 -Trying: n_estimators=161, learning_rate=0.5
  --Cross validated mean accuracy: 0.9905358217940998
  --Training 'deceased' recall=0.8323653098110979 | macro recall 0.9507431137534024 | micro recall 0.9905358217940998
 -Trying: n_estimators=161, learning_rate=1.25
  --Cross validated mean accuracy: 0.9903057060672955
  --Training 'deceased' recall=0.8337083429114025 | macro recall 0.9509197453797094 | micro recall 0.9903057060672955
 -Trying: n_estimators=161, learning_rate=2.0
  --Cross validated mean accuracy: 0.9905946886079336
  --Training 'deceased' recall=0.8299040089665751 | macro recall 0.9501923581871985 | micro recall 0.9905946886079336
 -Trying: n_estimators=300, learning_rate=0.5
  --Cross validated mean accuracy: 0.9906589069502977
  --Training 'deceased' recall=0.8292322670500899 | macro recall 0.9501179304906321 | micro recall 0.9906589069502977
 -Trying: n_estimators=300, learning_rate=1.25
  --Cross validated mean accuracy: 0.9903217606528866
  --Training 'deceased' recall=0.8314697040038582 | macro recall 0.9503957664370993 | micro recall 0.9903217606528866
 -Trying: n_estimators=300, learning_rate=2.0
  --Cross validated mean accuracy: 0.9905492006154257
  --Training 'deceased' recall=0.8294556802081784 | macro recall 0.950078657220725 | micro recall 0.9905492006154257
 **Time: grid_search took 19:36:49.809578
== Total running time 19:36:59.350578 ==

n_estimators | learning_rate | cross validation score | macro recall | deceased recall | micro recall
Best cross validation score: [300, 0.5, 0.9906589069502977, 0.9501179304906321, 0.8292322670500899, 0.9906589069502977]
Best macro recall: [25, 0.5, 0.9904314669877583, 0.9510300501090976, 0.8337081926671805, 0.9904314669877583]
Best deceased recall: [46, 0.5, 0.9904635761589405, 0.9510180531648812, 0.8337084931556245, 0.9904635761589405]
Best micro recall: [300, 0.5, 0.9906589069502977, 0.9501179304906321, 0.8292322670500899, 0.9906589069502977]
>>>
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