Raport proiect Ingineria sistemelor cu inteligență artificială

Nume: Ciobanu Matei-Ciprian

Grupă: 421E

Nume baza de date: Breast Cancer Wisconsin (Diagnostic)

Problema: Clasificare

Trebuie sa determin daca o tumoare este benigna sau maligna. Am 369 de exemple (date), 11 dimensiuni/atribute si o singura clasa care reprezinta tipul tumorii.

Numar de clase: 1

Numar exemple: 369

Dimensiuni: 11

Librari:

* import numpy as np
* import pandas as pd
* from sklearn.model selection import train test split
* from sklearn.ensemble import RandomForestClassifier;
* from sklearn.metrics import accuracy\_score

Numar exeple pentru antrenare: 200

Numar exemple pentru testare: 169

Metrica folosita pentru masurarea performantei: procentaj

Variatia parametrilor:

Random Forest cu 10 arbori

Se variaza concomitent (toate combinatiile posibile)

* procentul "in-bag" -25%,50%, 85%
* Numarul de dimensiuni alese intr-un nod 10%, 50% 80%

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| Procent „in-bag” | Nr dimensiuni | Acuratete | Predictie |
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