

# Raport Proiect ISIA

## Ce problema rezolvam?

Determinarea procentajului nivelului de Ozon

## Descriere data

- Dataset : <https://archive.ics.uci.edu/ml/datasets/Ozone+Level+Detection>
- Dimensiune date : 2536x73
- Informațiile atributelor:

WSR0-WSR23: continous

WSR\_PK: continous.

WSR\_AV: continous.

T0-T23: continous:

T\_PK: continous.

T\_AV: continous.

T85: continous.

RH85: continous.

U85: continous.

V85: continous.

HT85: continous.

T70: continous.

RH70: continous.

U70: continous.

V70: continous.

HT70: continous.

T50: continous.

RH50: continous.

U50: continous.

V50: continous.

HT50: continous.

KI: continous.

TT: continous.

SLP: continous.

SLP\_: continous.

Precp: continous.

## Librarii folosite

- sklearn
- pandas
- numpy

## Folosirea datelor

Am luat setul de date si l-am impartit in :

- 75% date de train
- 25% date de test

## Parametrii Retelei Neuronale

- 1 strat ascuns - 50 neuroni
- 1 strat ascuns - 200 neuroni
- 2 straturi ascunse - 70 si 50 neuroni
- Learning rate - 0.1 și 0.01

## Rezultate

- 1 strat ascuns(50 neuroni) si learning rate = 0.01 => 98.87%
- 1 strat ascuns(200 neuroni) si learning rate = 0.01 => 99.06%
- 2 straturi ascunse(70 si 50 neuroni) si learning rate = 0.01 => 99.06%
  
- 1 strat ascuns(50 neuroni) si learning rate = 0.1 => 99.065%
- 1 strat ascuns(200 neuroni) si learning rate = 0.1 => 98.878%
- 2 straturi ascunse(70 si 50 neuroni) si learning rate = 0.1 => 99.065%