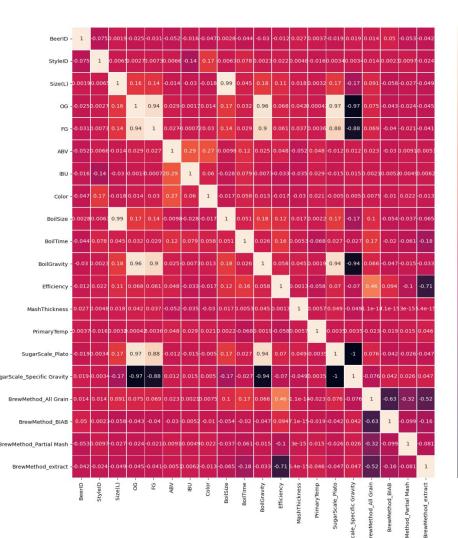


Clara Sorolla Anglès 1569191 Aprenentatge Computacional MatCAD

https://github.com/clarasoan/BeerRecipes



BeerID int64 object Name URL object Style object StyleID int64 Size(L) float64 OG float64 float64 FG ABV float64 float64 IBU Color float64 **BoilSize** float64 BoilTime int64 BoilGravity float64 Efficiency float64 MashThickness float64 SugarScale object BrewMethod object PitchRate float64 PrimaryTemp float64 PrimingMethod object PrimingAmount object UserId float64 dtype: object

- 0.75

- 0.50

- 0.25

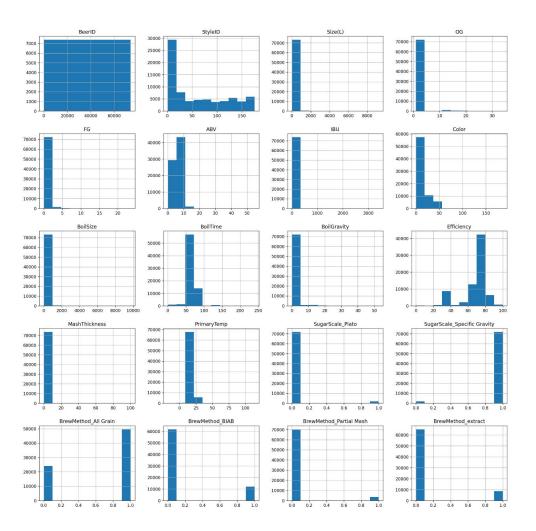
0.00

-0.25

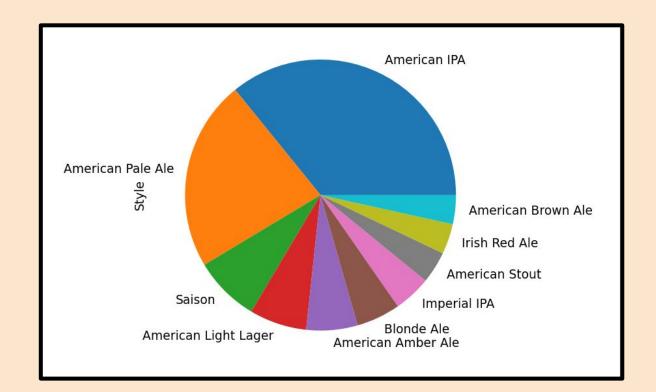
-0.50

-0.75

#### **EXPLORATORY DATA ANALYSIS**



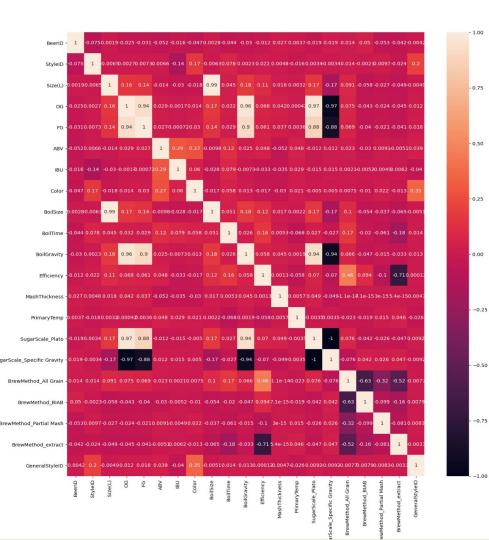




#### **GENERALSTYLE**

- -Ale
- -IPA
- ·Pale Ale
- -Lager
- ·Stout
- **·Bitter**
- -Cider
- **Porter**
- ·Other

**PREPROCESSING** 



### **PREPROCESSING**

## Atribut objectiu: 'Style'

	Original	Escalat
LogisticRegression	0.214175	0.396467
SGDClassifier	0.046233	0.273878
KNeighbors Classifier	0.176741	0.469573
DecisionTreeClassifier	0.470385	0.468964
GaussianNB	0.230217	0.251946
RandomForest	0.541461	0.540378

## Atribut objectiu: 'GeneralStyle'

	Original	Escalat
LogisticRegression	0.558857	0.553916
SGDClassifier	0.339538	0.409734
KNeighbors Classifier	0.449198	0.698166
${\bf Decision Tree Classifier}$	0.993299	0.992419
GaussianNB	0.376701	0.378055
RandomForest	0.896703	0.880661

## **MODEL SELECTION**

# **Logistic Regression**

	Original	Escalat
С	2.195254	2.179533
penalty	I1	l1

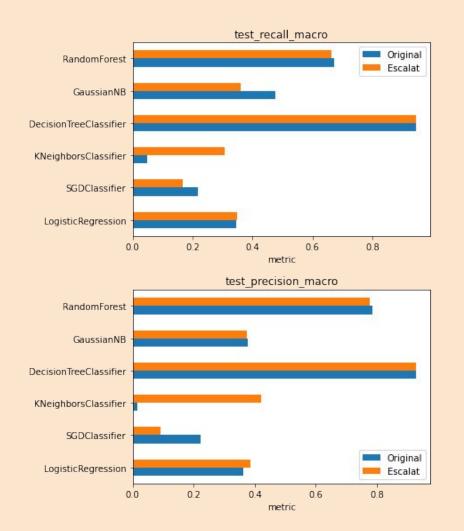
#### **Decision Tree Classifier**

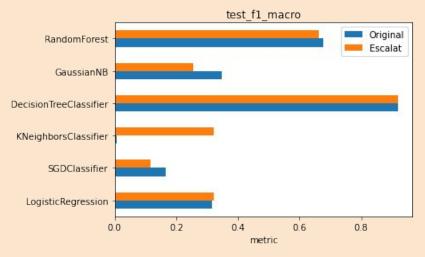
	Original	Escalat
criterion	entropy	entropy

#### **Random Forest Classifier**

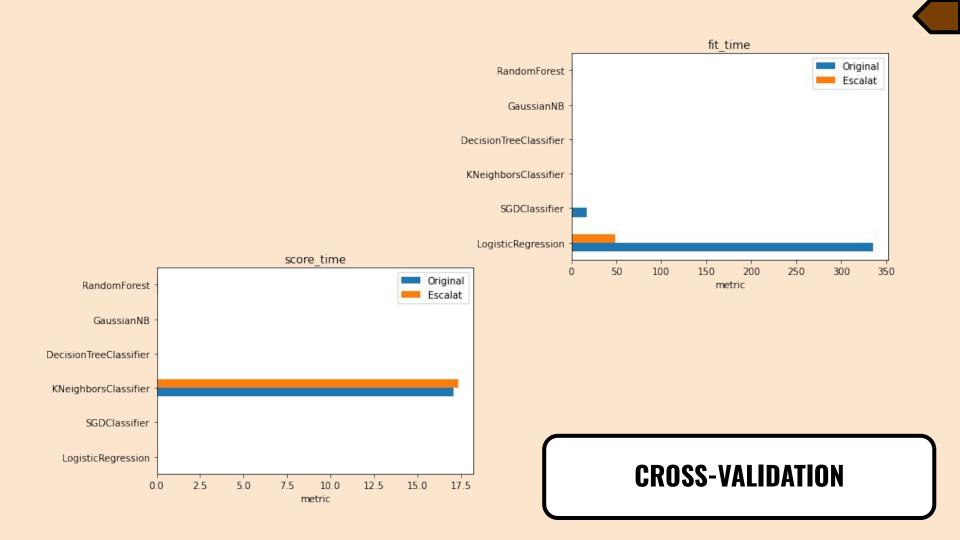
Original	Escalat
100	50
1	2
	Original 100

**HYPER PARAMETER SEARCH** 

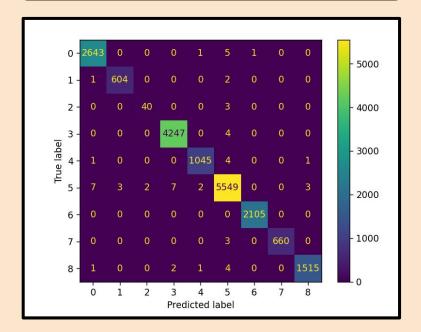




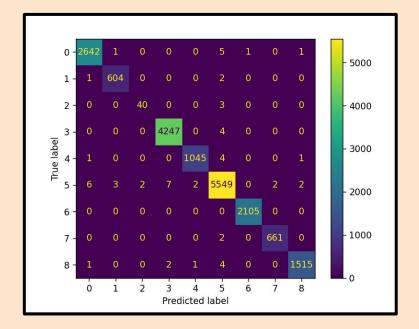
**CROSS-VALIDATION** 



### **Dataset original**



#### **Dataset escalat**



**CROSS-VALIDATION** 

