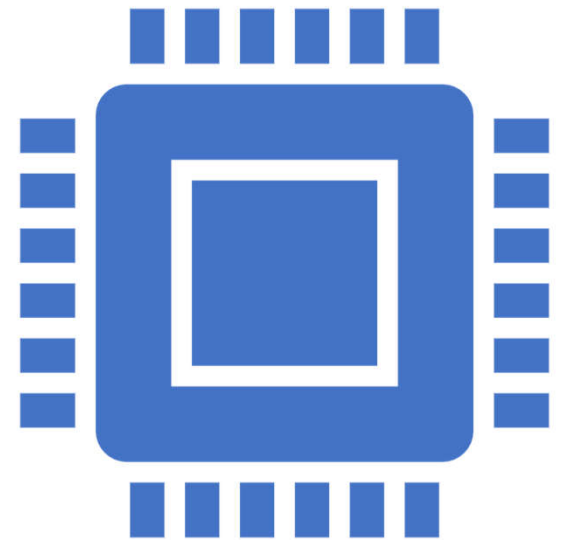


# Aulas Práticas



# IDE's

- R: RStudio (Anaconda)
- Python:
  - Spyder
  - Jupyter Notebook, JupyterLab
  - Google Colab



# Projeto Web R

Auto Machine Learning

Criação do Modelo    Previsão

Selecione o arquivo:    Tempo máximo (min.):    Processar

Browse...    Churn\_Modelling\_treino.csv    1    Upload complete

model_id	auc	logloss	aucpr	mean_per_class_error	rmse	mse
StackedEnsemble_AllModels_AutoML_20200508_214616	0.87	0.34	0.70	0.23	0.32	0.10
GBM_grid_1_AutoML_20200508_214616_model_9	0.86	0.34	0.70	0.23	0.32	0.10
GBM_grid_1_AutoML_20200508_214616_model_2	0.86	0.34	0.70	0.24	0.32	0.10
StackedEnsemble_BestOfFamily_AutoML_20200508_214616	0.86	0.34	0.70	0.24	0.32	0.10
GBM_5_AutoML_20200508_214616	0.86	0.34	0.70	0.23	0.32	0.10
GBM_grid_1_AutoML_20200508_214616_model_8	0.86	0.34	0.69	0.24	0.32	0.10
GBM_grid_1_AutoML_20200508_214616_model_5	0.86	0.34	0.70	0.23	0.32	0.10
GBM_grid_1_AutoML_20200508_214616_model_1	0.86	0.34	0.70	0.24	0.32	0.10
GBM_1_AutoML_20200508_214616	0.86	0.34	0.69	0.24	0.32	0.10

Auto Machine Learning

Criação do Modelo    Previsão

Selecione o arquivo:    Processar

Browse...    Churn\_Modelling\_prever.csv    Upload complete

predict	p0	p1
0	0.92	0.08
0	0.93	0.07
1	0.03	0.97
0	0.94	0.06
0	0.93	0.07
0	0.91	0.09
0	0.88	0.12
0	0.86	0.14

<https://cientistadados.shinyapps.io/AutoML/>

# Dados

- Análise de Evasão de Clientes
- Formato csv delimitado por ponto e vírgula

Arquivo	Instâncias	Classe
Churn_treino	10 k	Sim
Churn_teste	2,5 k ~	Não
Churn_prever.csv	9	Não

# Dados

CreditScore	Geography	Gender	Age	Tenure	Balance	NumOfProducts	HasCrCard	IsActiveMember	EstimatedSalary	Exited
619	France	Female	42	2	0	1	1	1	10134888	1
608	Spain	Female	41	1	8380786	1	0	1	11254258	0
502	France	Female	42	8	1596608	3	1	0	11393157	1
699	France	Female	39	1	0	2	0	0	9382663	0
850	Spain	Female	43	2	12551082	1	1	1	790841	0
645	Spain	Male	44	8	11375578	2	1	0	14975671	1
822	France	Male	50	7	0	2	1	1	100628	0
376	Germany	Female	29	4	11504674	4	1	0	11934688	1
501	France	Male	44	4	14205107	2	0	1	749405	0
684	France	Male	27	2	13460388	1	1	1	7172573	0
528	France	Male	31	6	10201672	2	0	0	8018112	0
497	Spain	Male	24	3	0	2	1	0	7639001	0
476	France	Female	34	10	0	2	1	0	2626098	0
549	France	Female	25	5	0	2	0	0	19085779	0
635	Spain	Female	35	7	0	2	1	1	6595165	0
616	Germany	Male	45	3	14312941	2	0	1	6432726	0
653	Germany	Male	58	1	13260288	1	1	0	509767	1
549	Spain	Female	24	9	0	2	1	1	1440641	0
587	Spain	Male	45	6	0	1	0	0	15868481	0