Relatório - Tópicos Especiais

Bases utilizadas no projeto:
Base Wine
https://archive.ics.uci.edu/ml/datasets/Wine

Base Telesposcio Gama https://archive.ics.uci.edu/ml/datasets/MAGIC+Gamma+Telescope

Tae
https://archive.ics.uci.edu/ml/machine-learning-databases/tae/

Link para o código: https://github.com/jiyose12/machinelearning-IFPB

Integrantes do Projeto: José Victor Dantas
José Raimundo Fernandes Filho

Professor: Thiago Moura

Resultados:

Média Final

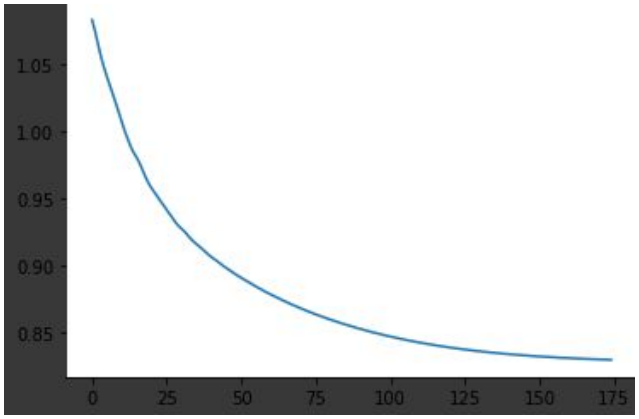
Base Wine - Média de todas as iterações

	0	1	2	3	4	5	6	7	8	9
tree_entropy	94.0	94.0	83.0	89.0	89.0	89.0	100.0	94.0	100.0	76.0
tree_gini	89.0	89.0	67.0	89.0	83.0	83.0	100.0	89.0	94.0	76.0
knn5	67.0	83.0	67.0	61.0	67.0	72.0	72.0	83.0	82.0	88.0
knn10	78.0	83.0	72.0	78.0	72.0	61.0	89.0	72.0	76.0	82.0
mlp_tanh_51010	56.0	83.0	67.0	50.0	78.0	100.0	100.0	94.0	88.0	100.0
mlp_relu_612	56.0	50.0	61.0	56.0	44.0	56.0	50.0	61.0	59.0	71.0
mlp_tanh_612	44.0	61.0	67.0	50.0	50.0	72.0	56.0	67.0	76.0	47.0
mlp_relu_51010	89.0	89.0	89.0	89.0	78.0	94.0	100.0	94.0	100.0	94.0
kmeans	67.0	72.0	72.0	61.0	56.0	67.0	67.0	72.0	82.0	94.0

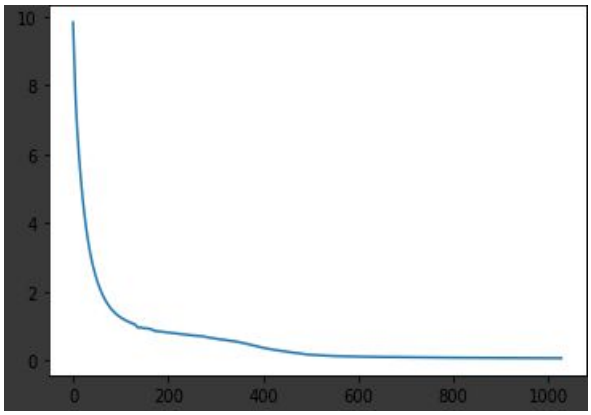
	0
Arvore_Entropy	91.0
Arvore_Gini	86.0
Mlp_Tanh_51010	82.0
Mlp_Tanh_612	59.0
Mlp_Relu_51010	92.0
Mlp_Relu_612	56.0
Knn5	74.0
Knn10	76.0
KMeans	72.0

Taxa de Erro (Wine):

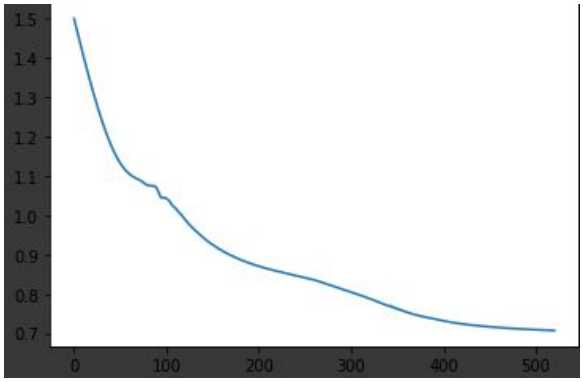
(MLP TANH 5, 10, 10)



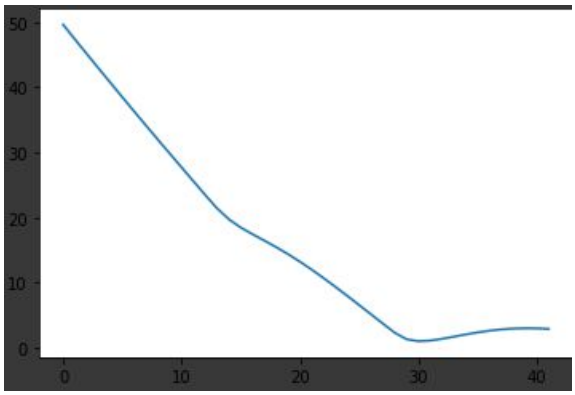
(MLP RELU 5, 10, 10)



(MLP TANH 6,12)



(MLP RELU 6,12)



Base Tae - Média da Iterações

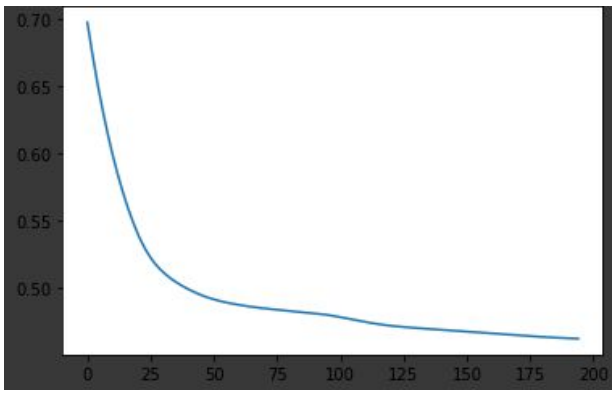
	0	1	2	3	4	5	6	7	8	9
tree_entropy	100.0	100.0	100.0	87.0	93.0	67.0	73.0	80.0	47.0	73.0
tree_gini	100.0	100.0	100.0	87.0	93.0	67.0	73.0	87.0	53.0	73.0
knn5	81.0	80.0	87.0	73.0	80.0	67.0	73.0	73.0	67.0	73.0
knn10	88.0	80.0	80.0	80.0	80.0	80.0	73.0	73.0	80.0	80.0
mlp_tanh_51010	81.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	87.0
mlp_relu_51010	81.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	87.0
mlp_tanh_48	81.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	87.0
mlp_relu_48	88.0	87.0	87.0	87.0	80.0	73.0	73.0	87.0	53.0	73.0
kmeans	81.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	87.0

Média Final

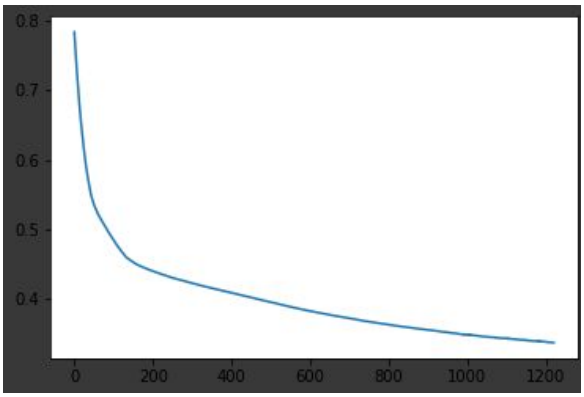
	0
Arvore_Entropy	82.0
Arvore_Gini	83.0
Mlp_Tanh_51010	81.0
Mlp_Tanh_48	81.0
Mlp_Relu_51010	81.0
Mlp_Relu_48	79.0
Knn5	75.0
Knn10	79.0
KMeans	81.0

Taxa de Erro (Tae):

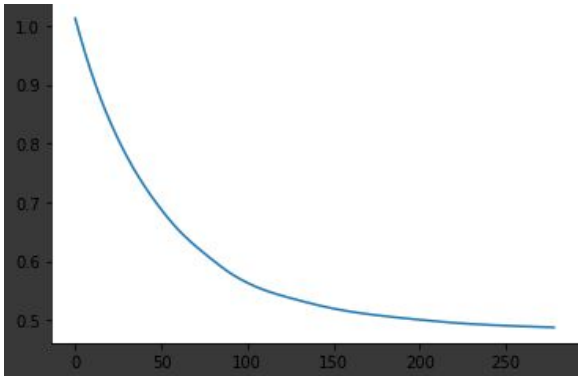
(MLP TANH 5, 10, 10)



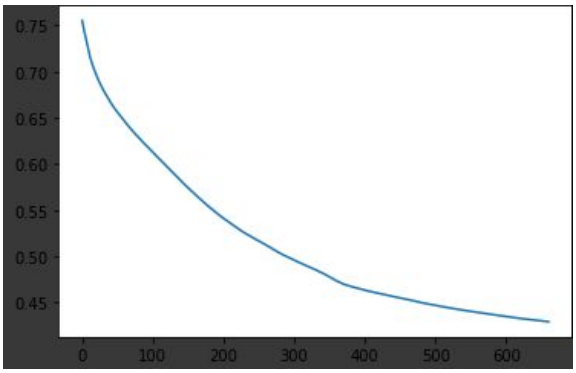
(MLP RELU 5, 10, 10)



(MLP TANH 6,12)



(MLP RELU 6,12)



Base Magic - Média de todas as iterações

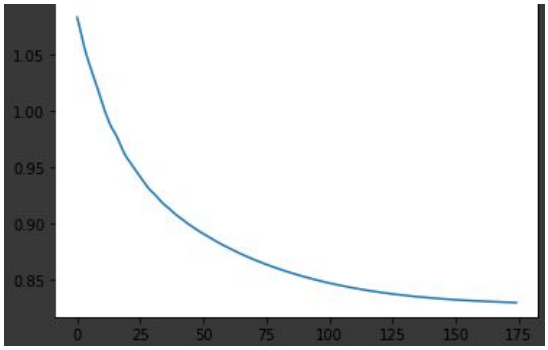
	0	1	2	3	4	5	6	7	8	9
tree_entropy	82.0	81.0	82.0	82.0	81.0	82.0	81.0	83.0	83.0	82.0
tree_gini	81.0	81.0	82.0	81.0	82.0	81.0	80.0	81.0	82.0	82.0
knn5	81.0	81.0	82.0	81.0	80.0	82.0	80.0	81.0	82.0	81.0
knn10	81.0	81.0	82.0	82.0	80.0	81.0	81.0	81.0	82.0	81.0
mlp_tanh_51010	80.0	78.0	81.0	79.0	78.0	80.0	80.0	78.0	80.0	80.0
mlp_relu_51010	83.0	82.0	83.0	82.0	82.0	83.0	83.0	83.0	85.0	83.0
mlp_tanh_48	80.0	78.0	81.0	77.0	79.0	80.0	81.0	80.0	80.0	79.0
mlp_relu_48	69.0	83.0	83.0	83.0	83.0	83.0	83.0	82.0	84.0	82.0
kmeans	65.0	65.0	65.0	64.0	65.0	64.0	64.0	65.0	65.0	65.0

Média Final

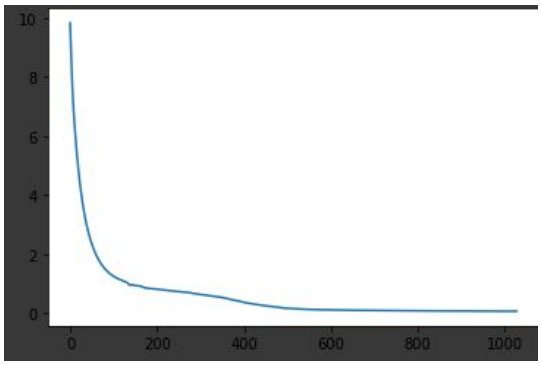
	0
Arvore_Entropy	82.0
Arvore_Gini	81.0
Mlp_Tanh_51010	79.0
Mlp_Tanh_48	80.0
Mlp_Relu_51010	83.0
Mlp_Relu_48	82.0
Knn5	81.0
Knn10	81.0
KMeans	65.0

Taxa de Erro (Magic):

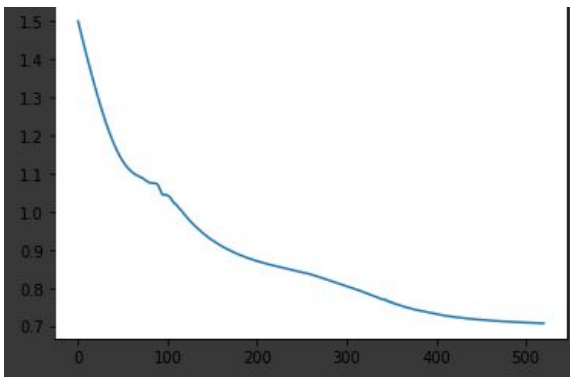
(MLP TANH 5, 10, 10)



(MLP RELU 5, 10, 10)



(MLP TANH 6,12)



(MLP RELU 6,12)