wAlves - Description des Models

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Description de l'entraînement des Models Test :

Model	Type de model	Layers	Optimizer	Loss	Metrics	Epochs	Data file name	Evaluate	Python	Tensorflow	Tensorflow decision forests	Tensorflowjs
ModelT1v1.h5	tf.keras.Sequential()	tf.keras.layers.Dense(64, activation='relu', input_shape=(6,)), tf.keras.layers.Dense(32, activation='relu'), tf.keras.layers.Dense(1)	adam	mean_squared_error	mae	100	DATA_SeaDataNetLight.json ~ 28 000 input/output	Loss : 0.3665308356285095 mae : 0.5625569224357605	V3.10.12	V2.15.1	v1.8.1	v4.19.0
ModelT1v2.h5						50		loss : 0.13015851378440857 mae : 0.33455461263656616				
ModelT1v3.h5		tf.keras.layers.Dense(128, activation='relu', input_shape=(6,)), tf.keras.layers.Dense(64, activation='relu'), tf.keras.layers.Dense(1)				50		loss : 0.038097038865089417 mae : 0.13224273920059204				
ModelT1v4.h5		tf.keras.layers.Dense(128, activation='relu', input_shape=(6,)), tf.keras.layers.Dense(64, activation='relu'), tf.keras.layers.Dense(1)				100		Loss : 0.089024208486080 17 mae : 0.2614676058292389				
ModelT1v5.h5		tf.keras.layers.Dense(128, activation='relu', input_shape=(6,)), tf.keras.layers.Dense(64, activation='relu'), tf.keras.layers.Dense(1)			mean_absolute_error	50		loss : 0.022227570414543152 mean_absolute_error : 0.09850890189409256				
ModelT1v6.h5		tf.keras.layers.Dense(128, activation='relu', input_shape=(6,)), tf.keras.layers.Dense(64, activation='relu'), tf.keras.layers.Dense(1)			mean_squared_error	50		loss : 0.3286113739013672, mean_squared_error : 0.3286113739013672				
ModelT1v7.h5		tf.keras.layers.Dense(128, activation='relu', input_shape=(6,)), tf.keras.layers.Dense(64, activation='relu'), tf.keras.layers.Dense(1)		mean_absolute_error	mean_absolute_error	50		loss : 0.4873559772968292, mean_absolute_error : 0.4873559772968292				
ModelT1v8.h5		tf.keras.layers.Dense(128, activation='relu', input_shape=(6,)), tf.keras.layers.Dense(64, activation='relu'), tf.keras.layers.Dense(1)		binary_crossentropy	mean_absolute_error	50		loss : 7.512676239013672, mean_absolute_error : 248.97056579589844				

Model	Type de model	Layers	Optimizer	Loss	Metrics	Epochs	Data file name	Evaluate	Python	Tensorflow	Tensorflow decision forests	Tensorflowjs
ModelDFv1.h5	tfdf.keras.RandomForestModel(task = tfdf.keras.Task.REGRESSION)	???	???	???	mse ?	??	DATA_SeaDataNetLight.json ~ 28 000 input/output	loss : 0.0 mean_squared_error : 0.1041608601808548	V3.10.12	V2.15.1	v1.8.1	v4.19.0

Model	Type de model	Layers	Optimizer	Loss	Metrics	Epochs	Data file name	Evaluate	Python	Pytorch (torch)		
ModelT2v1.h5	Sublcass of torch.nn.Module	torch.nn.Linear(6, 128) torch.nn.Linear(128, 64) torch.nn.Linear(64, 1)	adam	mse	mse	50	DATA_SeaDataNetLight.json ~ 28 000 input/output	loss (final epoch) : 0.0923 loss : 2.5353	V3.10.9	v2.4.1+cu118		
ModelT2v2.h5						100		loss (final epoch) : 0.0906 loss : 6.3319				

Note :

- Impossible de déployer un modèle TF-DF avec Tensorflow.js

Description de l'entraînement des Models Disponibles :

Model	Type de model	Layers	Optimizer	Loss	Metrics	Epochs	Data file name	Evaluate	Python	Tensorflow	Tensorflow decision forests	Tensorflowjs
wAlves1V5.0	tf.keras.Sequential()	tf.keras.layers.Dense(128, activation='relu', input_shape=(6,)), tf.keras.layers.Dense(64, activation='relu'), tf.keras.layers.Dense(1)	adam	mean_squared_error	mean_absolute_error	50	DATA_SeaDataNetLight.json	loss : 0.022227570414543152 mean_absolute_error : 0.09850890189409256	V3.10.12	V2.15.1	v1.8.1	v4.19.0
wAlves1V5.1							DATA_SeaDataNetLight.json DATA_MeteoFranceLight.json DATA_NOAALight.json	final training loss : 0.7313				