Green Hackathon

Sujet : Déterminer l'impact carbon d'un algorithme.

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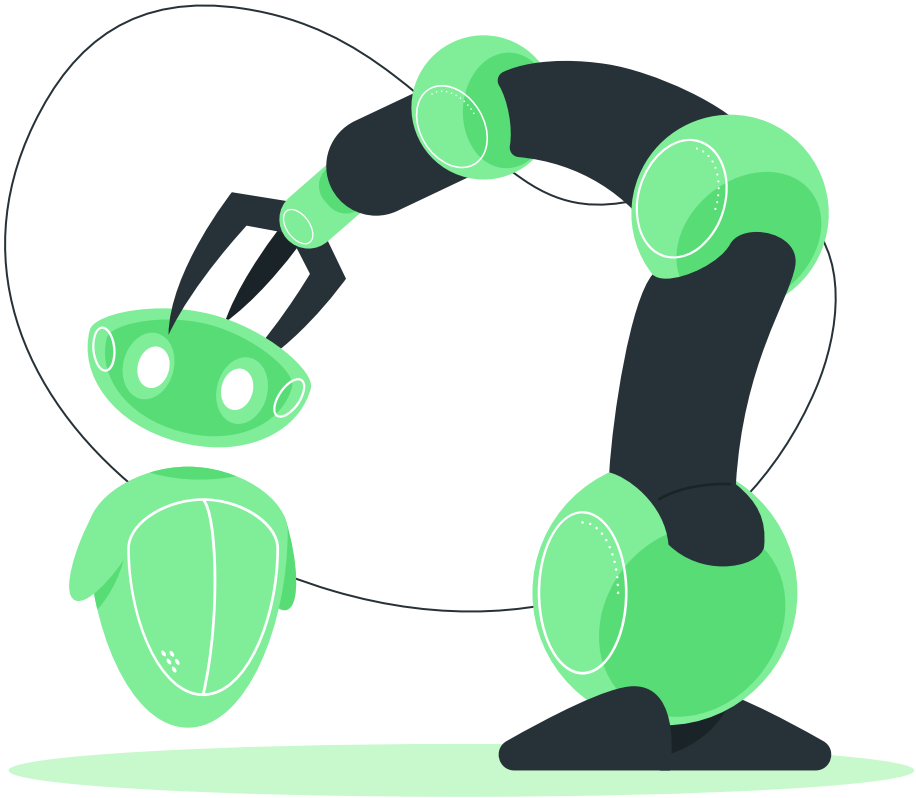
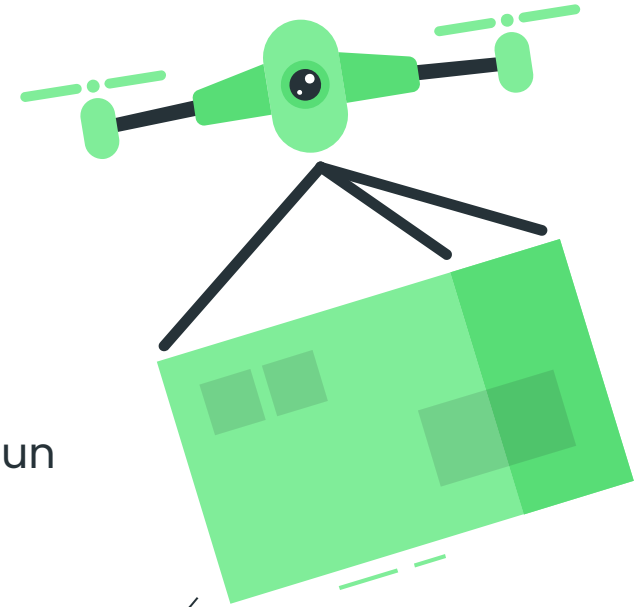
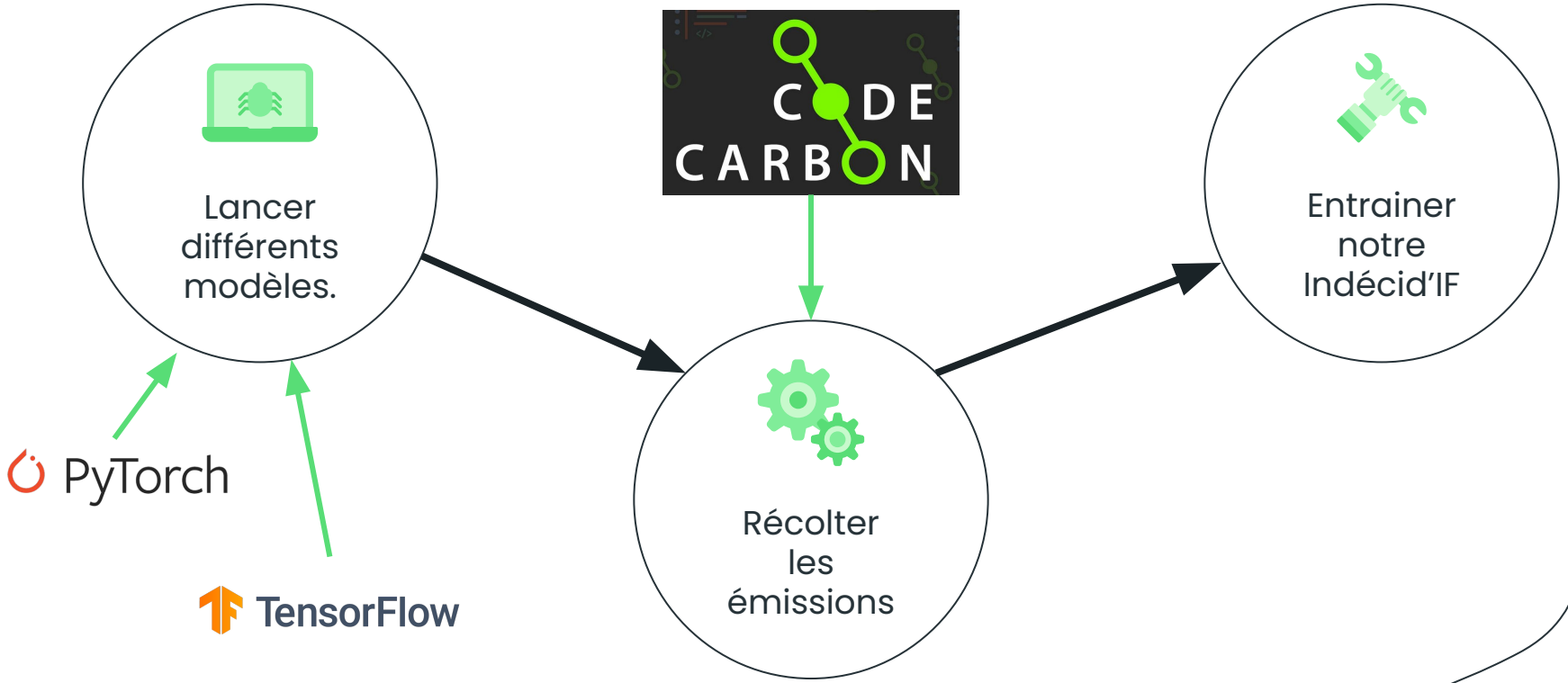


Notre Solution

Indécid'IF, le modèle qui estime l'impact d'un algorithme avant de le lancer.



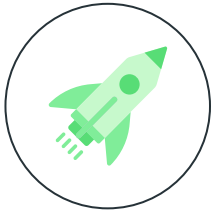
Architecture



Modèles sources

Image Classifier

Classification visage ou non visage

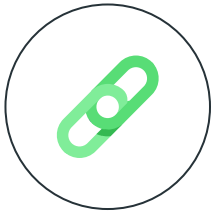


DNN Iris

Classification types de fleurs

Regression Housing

Prediction prix du logement



RNN NLP

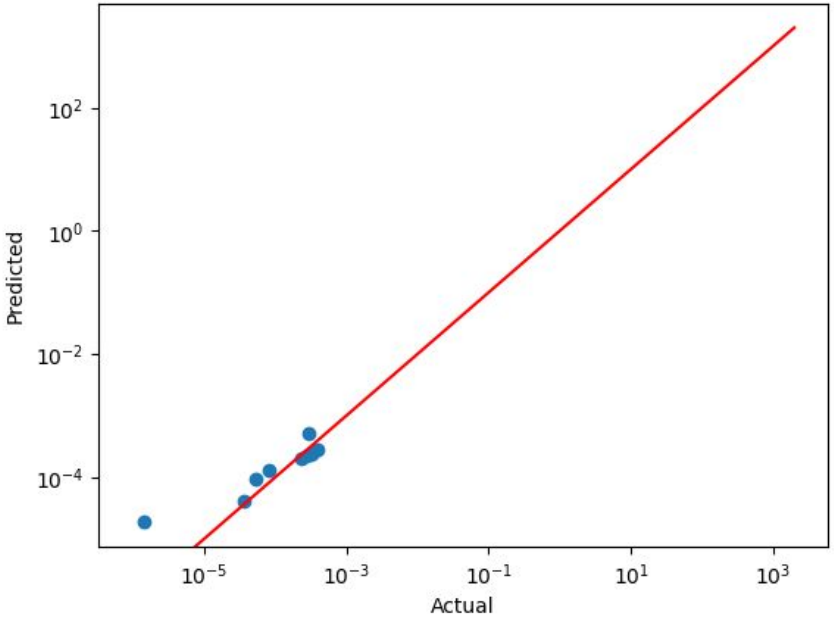
Détection de sentiments

Données collectées

	epochs	batch_size	dataset_size	non_trainable_params	Conv2D	Dense	Embedding	Flatten	MaxPooling2D	SimpleRNN	co2
0	10	32	2499	150	0	3	0	0	0	0	1.038368e-06
1	15	32	2499	150	0	3	0	0	0	0	9.404010e-07
2	20	32	2499	150	0	3	0	0	0	0	1.097761e-06
3	25	32	2499	150	0	3	0	0	0	0	1.260525e-06
4	30	32	2499	150	0	3	0	0	0	0	1.308075e-06

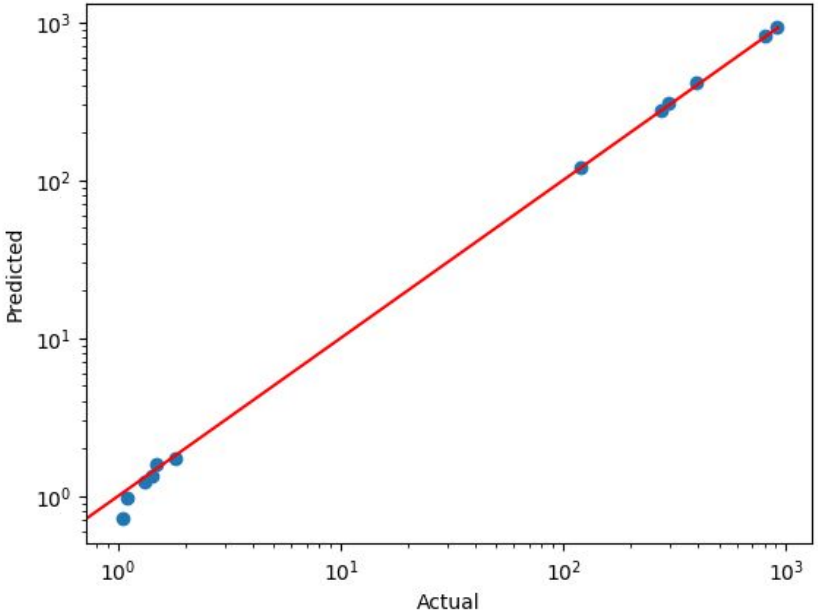
Empreinte carbone : mesuré en gramme

Resultats Indécid'IF (1/2)



Ridge

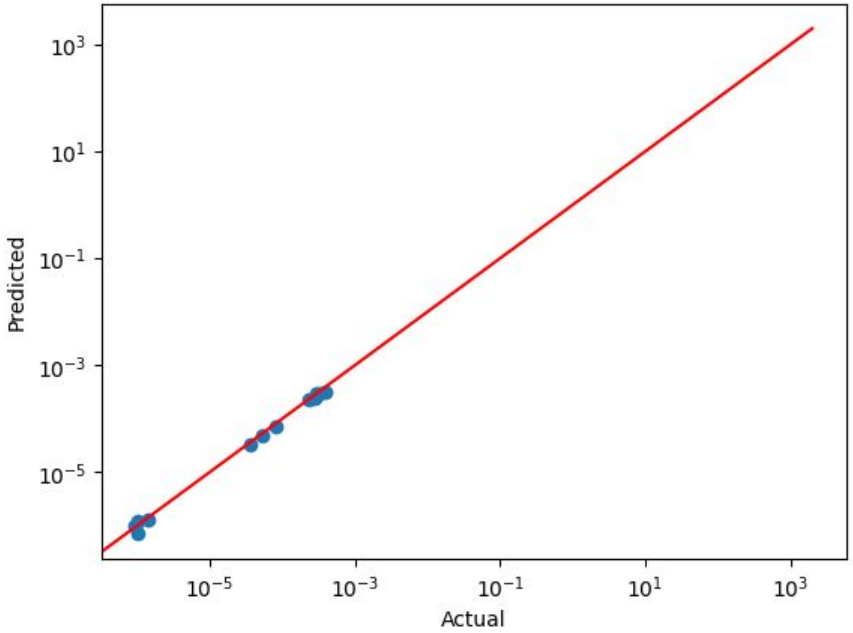
MAE : 6.1e-5

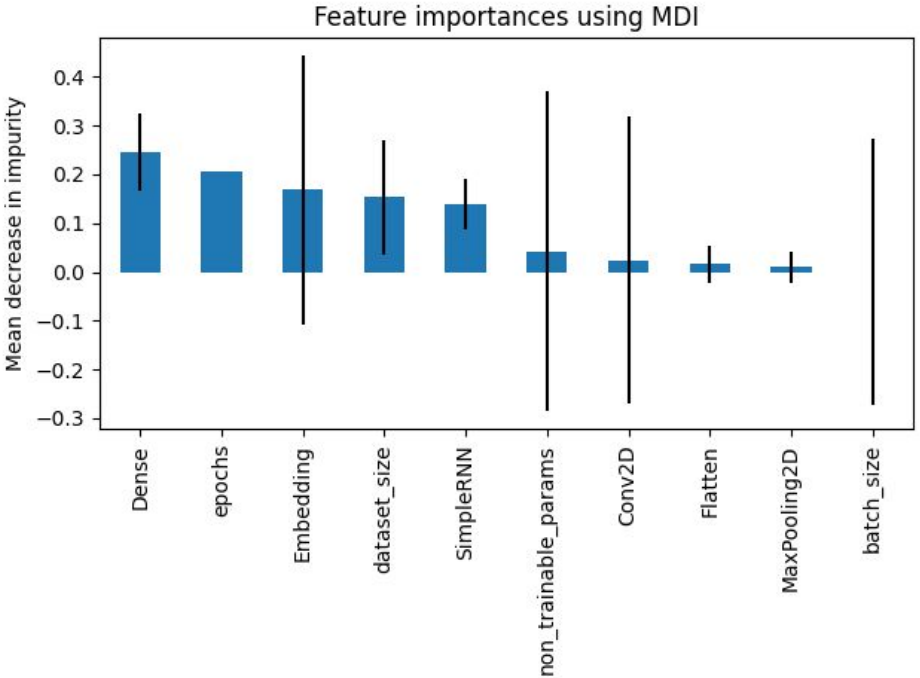


Polynomial

MAE : 1.4e-5

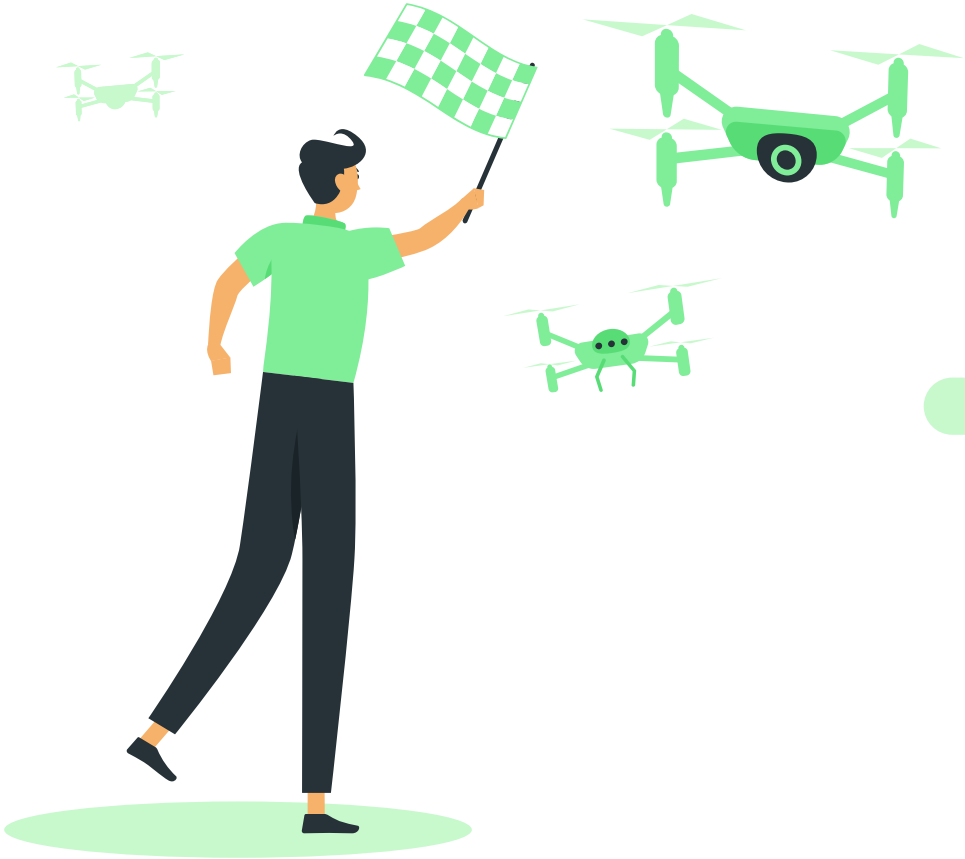
Resultats Indécid'IF (2/2)





Random Forest

MAE : 1.28e-5



Merci !

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