



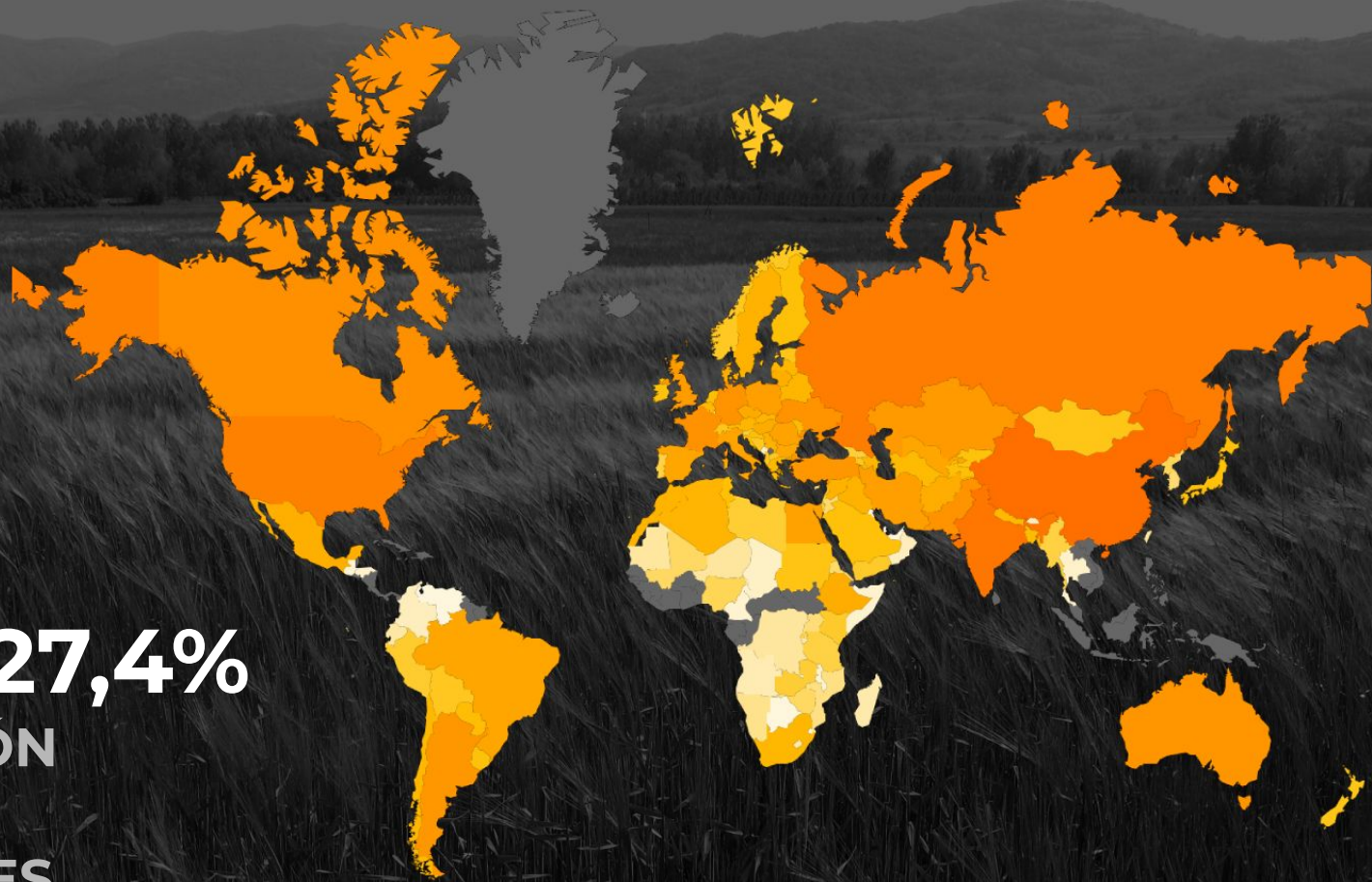
WHEAT CROP DISEASE PREDICTOR



Saturdays.AI
Murcia

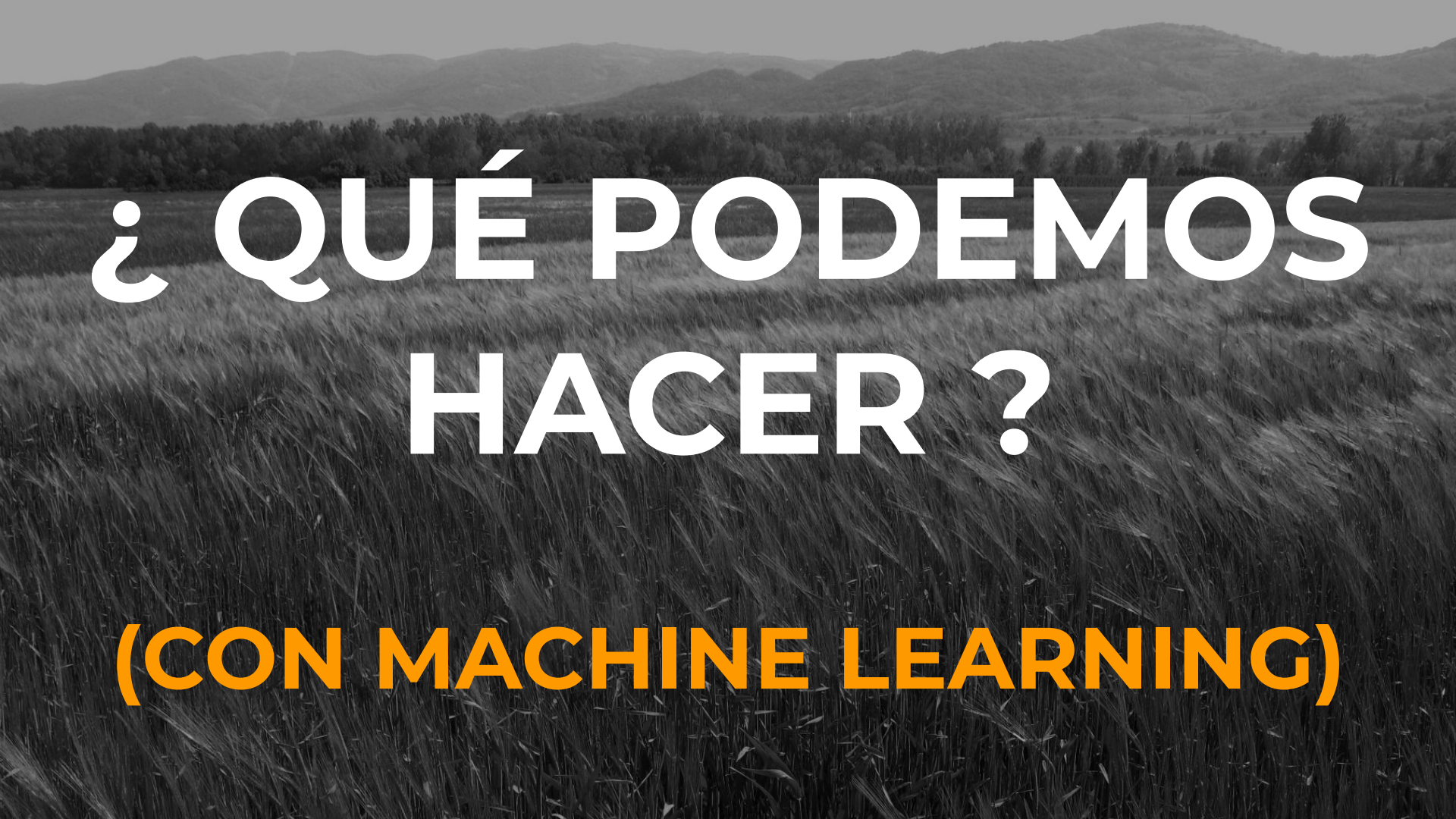
- Fernando Molina Molina
- Jose M. Rocamora Bernabeu
- Joaquín Alfonso González

TRIGO 27,4%
PRODUCCIÓN
MUNDIAL
DE CEREALES



PÉRDIDAS TRIGO 2020

-28% ≈ -213Mt



**¿ QUÉ PODEMOS
HACER ?**

(CON MACHINE LEARNING)



Wheat crop disease predictor

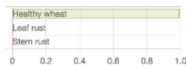
A machine learning algorithm to correctly classify if a plant is healthy, has stem rust, or has leaf rust.

Select a wheat image to classify

Upload & classify image



Healthy
wheat
99.30%



Prediction

Leaf Rust info Stem Rust info

Print report



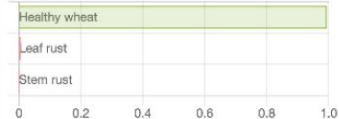
Saturdays.AI
Murcia

Saturdays.AI Murcia project developed by Fernando Molina, Jose M. Rocamora & Joaquin Alfonso

MacBook Pro



Healthy
wheat
99.30%



Prediction

Leaf Rust info Stem Rust info

Print report



Leaf rust
100.00%



Prediction

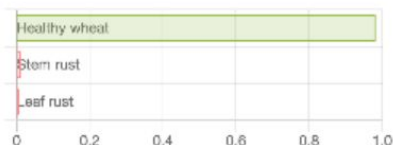
Leaf Rust info

Stem Rust info

Print report



Healthy
wheat
98.20%



Prediction

Leaf Rust info

Stem Rust info

Print report



Stem rust
100.00%



Prediction

Leaf Rust info

Stem Rust info

Print report



CONJUNTO DE TEST

Matriz de confusión

Real	Healthy	30	4	0
	Leaf	1	72	10
	Stem	2	7	78
	Predicho	Healthy	Leaf	Stem

Accuracy
≈ 90%

IMAGEN ORIGINAL



Leaf rust

HEAT MAP



Leaf / Leaf / 0.27 / 0.76

EVOLUCIÓN

**+ CULTIVOS
+ ENFERMEDADES**

**LOCALIZACIÓN
MURCIA**

**AUTOMATIZACIÓN
API REST**

**ACCESIBILIDAD
MÓVIL**

GRACIAS



Saturdays.AI
Murcia



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