



FIRE & SMOKE DETECTION

IMAGE RECOGNITION MODEL



Fire



Smoke



Neutral

Data Collection and Labeling

MODEL TRAINING AND PERFORMANCE

Iteration 1

Finished training on **2/6/2025, 10:09:21 AM** using **General** domain

Iteration id: **c2d535e7-7df0-4eba-8f5d-3f6880f8cf0f**

Classification type: **Multiclass (Single tag per image)**

Precision ⓘ



Recall ⓘ






AP ⓘ



MODEL TRAINING AND PERFORMANCE

Performance Per Tag

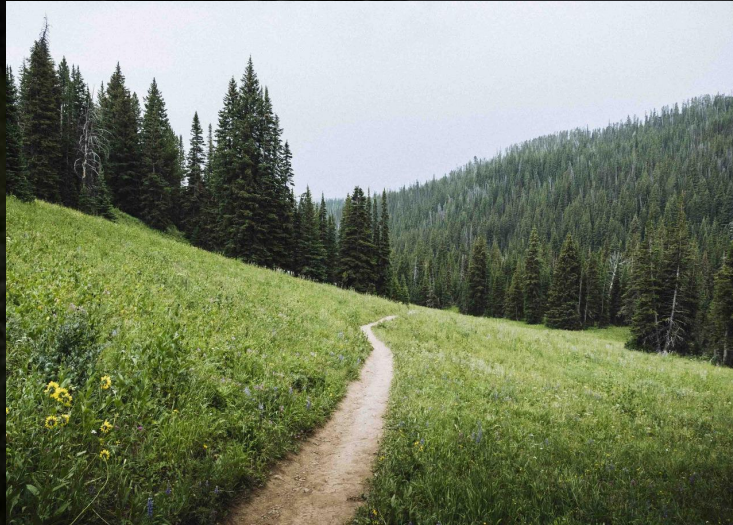
Tag	Precision [^]	Recall	A.P.	Image count
Smoke	100.0%	100.0%	100.0%	6 
Neutral	100.0%	100.0%	100.0%	6 
fire	100.0%	100.0%	100.0%	6 

Testing the Model and Assessing the performance

fire: 97.9%
Smoke: 2%
Neutral: 0%



Neutral: 97.8%
Smoke: 2.1%
fire: 0%



Smoke: 99.9%
fire: 0%
Neutral: 0%



Testing the Model and Assessing the performance

- If the accuracy is low, we have to retrain the model by adding more images in data. However, our accuracy is more than 95% so there are no changes to be made, and we can deploy and publish the model.





THANK YOU

PRESENTED BY:

SRINIVAS BHOOTAM

SHIVAM KANSARA

OM PATEL

RISHU DIXIT

SHASHIVADHAN C.