Deep Learing Big-Cats Classification Model

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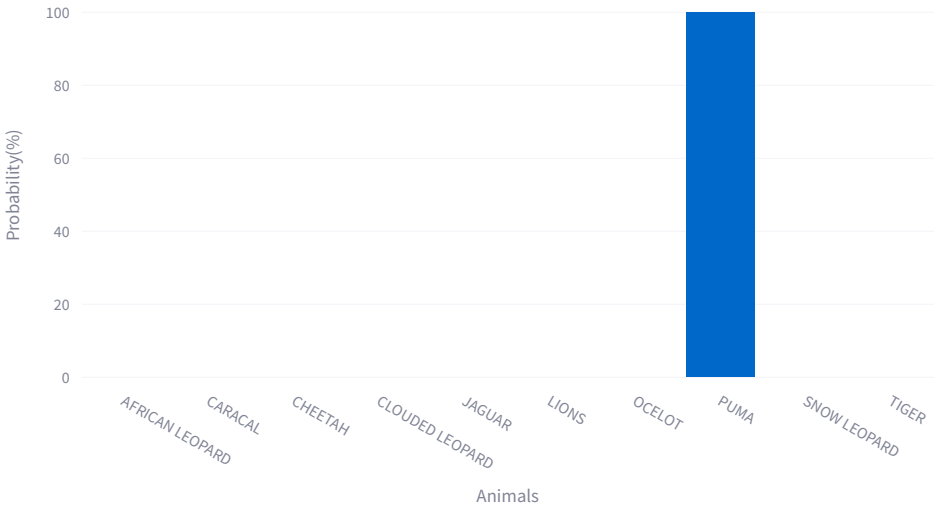
Prediction: PUMA

Probability: 100.0%



Streamlit Big Cats Classifier Deployment

Welcome to the Streamlit app for deploying our trained model that classifies 10 different kinds of big cats!

About the Model

Our model has been trained using PyTorch and TensorFlow with Convolutional Neural Networks (CNNs). It has achieved an impressive accuracy of 100% on both PyTorch and TensorFlow frameworks, ensuring

reliable performance.

Dataset Preparation Toolkit

This app is more than just model deployment; it's an all-in-one toolkit for creating high-quality image datasets. Our custom set of tools assists in:

- Organizing downloaded images
- Filtering out irrelevant images
- Removing duplicates
- Cropping images to focus on the region of interest
- Resizing images for uniformity

Model Training

We meticulously trained our model on a meticulously curated dataset consisting of images of 10 distinct types of big cats, including pumas, tigers, and others. The training process involved:

- Preprocessing the images using our toolkit to ensure uniformity and relevance
- Leveraging both PyTorch and TensorFlow frameworks for model training
- Utilizing Convolutional Neural Networks (CNNs) for image classification
- Fine-tuning the model parameters to achieve optimal performance

The rigorous training process, coupled with the robust dataset preparation, resulted in our model achieving an outstanding accuracy of 100% on both PyTorch and TensorFlow platforms.

Model Deployment

Now, you can leverage the power of our trained model right here in this Streamlit app. Simply upload an image of a big cat, and our model will predict its class accurately.

Instructions:

1. Upload an image using the file uploader.
2. View the predicted class along with the confidence score.

Feel free to explore and enjoy the seamless deployment experience!