Using a Custom Vision Service Model Offline

Andy Butland

SOFTWARE ARCHITECT AND DEVELOPER

@andybutland   web-matters.blogspot.it

Overview

The Prediction API supports image classification via HTTP requests

- You can export your model to work with it offline

Model preparation and export process

Offline Custom Vision Service model demos

- UWP application

- Xamarin/Android mobile app

- Python script

Compact Domains

Domains ⓘ

- ⦿ General
- ○ Food
- ○ Landmarks
- ○ Retail
- ○ Adult
- ○ General (compact)
- ○ Landmarks (compact)
- ○ Retail (compact)

Standard Domains

More subject matter options

Higher accuracy

Online only, via HTTP calls to the API

Compact Domains

Lower accuracy

Online and offline use

Demo

Preparing the model for offline use

- Switching to a compact domain
- Re-training

Exporting the model in various formats

Demo

Using a Custom Vision Service model in offline contexts

- UWP application

- Xamarin/Android mobile app

- Python script

Reviewing the code for each demonstration

- Source code available

Summary

Utilized your Custom Vision Service model in an offline context

Reviewed demos and code for three application platforms