Custom Vision – a 2-week POC

Quickly build a computer vision model to validate your business hypothesis.

We are a Microsoft Azure Gold Partner offering an extensive range of AI and Cloud Services: from implementing custom made machine learning models and AI Cloud Architecture consulting. We are also the fastest growing technology company according to the Financial Times. We offer a 2-week project to build a Proof-of-Concept artificial intelligence model for image classification or object detection on images using Custom Vision. The POC model aims to quickly validate the hypothesis that Computer Vision should be used to solve a given business problem.

Sample use cases include:

Image classification:

- Product quality inspection
- E-commerce photo attractiveness
- Product, animal, building type classification

Object detection

- Production line product defect detection
- Car monitoring on a parking lot
- Counting objects on product shelves

Requirements:

- 500 – 5000 client's labelled images (labelling is not part of the project)
- Tags / classes: 2 – 10
- Min labelled images per tag:
  - Classification: 50
  - Object detection: 50
- Accepted images types: JPG, PNG, BMP, GIF
- Min image height/width in pixels: 256
- Max image height/width in pixels: 10 240
- Max image size (training): 6 MB
- Max number of objects per image in object detection: 300
- Max number of classes per image in classification: 100

Results of the PoC project:

- Validated hypothesis whether a given problem is solvable with deep learning computer vision models
- Trained model on the given task
- Report describing the performance of the model and error analysis
- Recommendation for future development

Project outline:

Week 1:

- Data gathering and understanding
- Business problem definition
- Data preparation
- Data upload to Custom Vision and validation

Week 2:

- Model training
- Error analysis
- Data improvements (optional)
- Report & recommendation generation