

Module 1 Readings: Computer Vision Fundamentals on Google Cloud

Here are the assembled readings provided in Module 1.

Module 1: Introduction to Computer Vision and Pre-built ML Models with Vision API

- Lesson 1: What Is Computer Vision?
 - Internet growth statistics from Statista
 - The amount of visual data on Google Photos
- Lesson 3: Computer Vision Use Cases
 - The New York Times digitizes millions of historical photos using Google Cloud Technology
 - Box: Bringing image recognition and OCR to cloud content management
 - <u>Coastal classifiers: using AutoML Vision to assess and track environmental change</u>
- Lesson 4: Vision API Pre-built ML Models
 - DocumentAl API documentation
 - <u>Vision AI documentation</u>
 - Image: Purdue university
 - Demo instructions:

https://github.com/GoogleCloudPlatform/training-data-analyst/tree/master/courses/bdml_fundamentals/demos

- Demo Images:
 - Image cc0 (owl):
 - https://pixabay.com/en/owl-camouflage-wildlife-1576572/
 - Image cc0 (clipboard)
 - https://pixabay.com/en/clipboards-papers-text-quotes-924044/
 - Images cc0 (Coit Tower):
 - https://pixabay.com/en/coit-tower-san-francisco-skyline-1499662/
- Video Intelligence API document
- Google's human labeling program
- Lab intro:
 - Google Cloud Storage documentation
 - Google Cloud Vision API documentation
 - o Google Cloud Translation API documentation
 - Google Cloud Pub/Sub documentation
 - Cloud Functions documentation
- Additional Resources:
 - Machine Learning on Google Cloud
 - Google Cloud Big Data and Machine Learning Fundamentals
 - Machine Learning Crash Course Image Classification

Data growth article