Training Object Detection Models in Create ML
Object Detection
Image Classification
Image Classification

Dog
Object Detection
Object Detection

- Frisbee
- Dog
Object Detection
Object Detection

Label: Dog
Coordinates:
x: 1152, y: 291
width: 735, height: 800
Annotations JSON Format

[
    {
        "image": "image1.jpg",
        "annotations": [
            {
                "label": "carrot",
                "coordinates": {
                    "x": 120, "y": 164, "width": 230, "height": 119
                }
            },
            {
                "label": "orange",
                "coordinates": {
                    "x": 230, "y": 321, "width": 50, "height": 50
                }
            }
        ]
    },
    ...
]
Dice Detection Model

Creating Great Apps Using Core ML and ARKit

Thursday, 10:00
Dice Detection Model
Demo
Object Detection in Create ML
Considerations

Number of images

Balanced number of images in each class

30+ images per class
Considerations

Real-world data

Multiple angles

Variation of backgrounds

Different lighting conditions

Other objects in images
Considerations

A single class is enough
Considerations
A single class is enough
Vision Framework

Understanding Images in Vision Framework

Vision Framework: Building on Core ML

Wednesday, 10:00

WWDC 2017
Create ML for Activity, Text, and Recommendations

Machine Learning Labs

Thursday, 2:00

Daily