

# Introduction

The ML Peach RGB-D Dataset is composed by 2050 multi-modal images of peach on tree fields captured using Microsoft Azure Kinect. Each images contains 3 different modalities, including RGB image, Depth image and Infrared image.

All images were aligned with the RGB image and manually labelled in 4 classes: unobstructed, obscured by foliage, obscured by branches and obscured by fruit. Find annotations in ".txt" format inside "annotation\_yolo" folder. The camera parameters for each image taken are saved in ".txt" format inside "calib" folder. The following informations are some of the camera parameters.

## Color camera:

```
|Resolution|1280 x 720|
|FOV       |90° x 59° |
|Format    |  png    |
```

## Depth camera:

```
|Resolution|1024 x 1024|
|Mode      |   WFOV   |
|FoI       |120° x 120°|
```

## Folder structure:

```
ML Peach RGB-D Dataset
├─ depth
|   ├── 1.png
|   └─ ....
├─ rgb
```

```
|   ├── 1.png
|   └── ....
├── ir
|   ├── 1.png
|   └── ....
├── calib
|   ├── 1.txt
|   └── ....
├── annotation_yolo
|   ├── 1.txt
|   └── ....
└── data_index.mat
```

This dataset is available only for research and educational purpose and not for any commercial use.