

A stylized illustration of a face where the features are food items. The eyes are represented by a slice of watermelon and a sprig of green herbs. The nose is a small green leaf. The mouth is a large, open smile showing a row of small, round, yellow teeth. The background is a light pink color with white, wavy, cloud-like shapes. Various food items are scattered around the face: a carrot with green leaves in the top left, a bunch of yellow bananas in the top left, a strawberry in the top left, a slice of watermelon in the top right, a sprig of green herbs in the top right, an avocado in the bottom left, and a carrot with green leaves in the bottom right.

# ***Pizza Face Detection***

60121045-3 Thanapat Chanprasert  
60121063-6 Panupong Sukswan

# *Origin and problem*



# *Tools*

YOLOv5

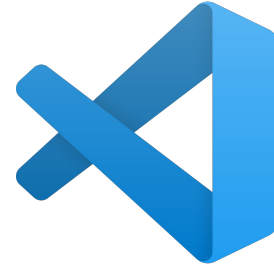
*YoloV5*

Object Detection  
Algorithms

colab

*Google Colab*

Free GPU  
Training Model



*VSCode*

Run Detection with  
Video and Real Time

# Various development processes



YOLOv5  
colab



*Automate Get  
data with  
Selenium*

*Labeling with  
Roboflow*

*Training*

*Use Weight and  
Detection*

*Real Time or In  
Video*





# *Result*

Demo Video , Image

# *Training*



*3 Classes*

Hawaiian , Pepperoni  
and Double Cheese



*300 Image  
Dataset*

100 image each Classes



*No  
Augmentation*

Experiment without  
Augmentation Dataset

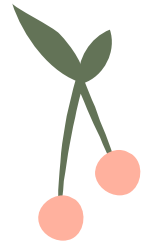


*1000 Epoch  
Training*

Experiment with 500 ,  
650 and 1,00 Epoch

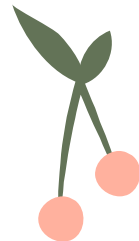


*Version 500 Epoch*





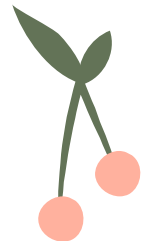
*Version 650 Epoch*







*Version 1000 Epoch*

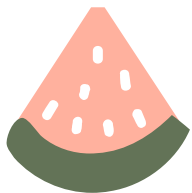
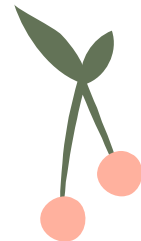




# Pepperoni Test

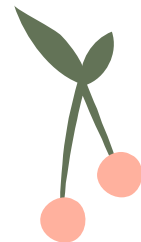


Based on latest 52-week IRI data





# Double Cheese





# Realttime



My Drive - Google Drive | Roboflow-Custom-YOLOv5[Worl... | Success code=4/1AY0e-g4EwA4... | ultralytics/yolov5: YOLOv5 in PyT... | hawaiian pizza - Google Search

google.com/search?q=hawaiian+pizza&rlz=1C1CHBF\_enTH875TH875&tbm=isch&source=iu&icbx=1&fir=mAF8vnmLSO0uM%252C%252CnlnACa1LQAnxM%252C\_&vet=1&usq=AI4\_-kTegnThwMuf6...

Panupong Suksuwan | Assignment | Trello | Thai-Nichi Institute... | LinkedIn | GitHub | Medium - Get smar... | Pastebin | YouTube | Google ulammun | Free vector icons -... | AIAT | CRM Tool

hawaiian pizza

hawaiian-pizza 0.57; 0.55  
double-cheese-pizza 0.33

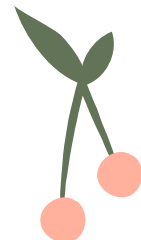
Hawaiian Pizza Recipe | myfood...  
myfoodbook.com.au

Hawaiian Pizza | Kay's Clean Eats  
kayscleaneats.com

best (2).pt

Type here to search

10:57 PM  
3/8/2021



# *Performance*

**91%**

Mean Average  
Precision

**90%**

Precision

**90%**

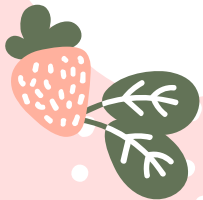
Recall

Train with 1,000 Epoch and YOLOv5s

*obstacles*



*Detect Wrong*



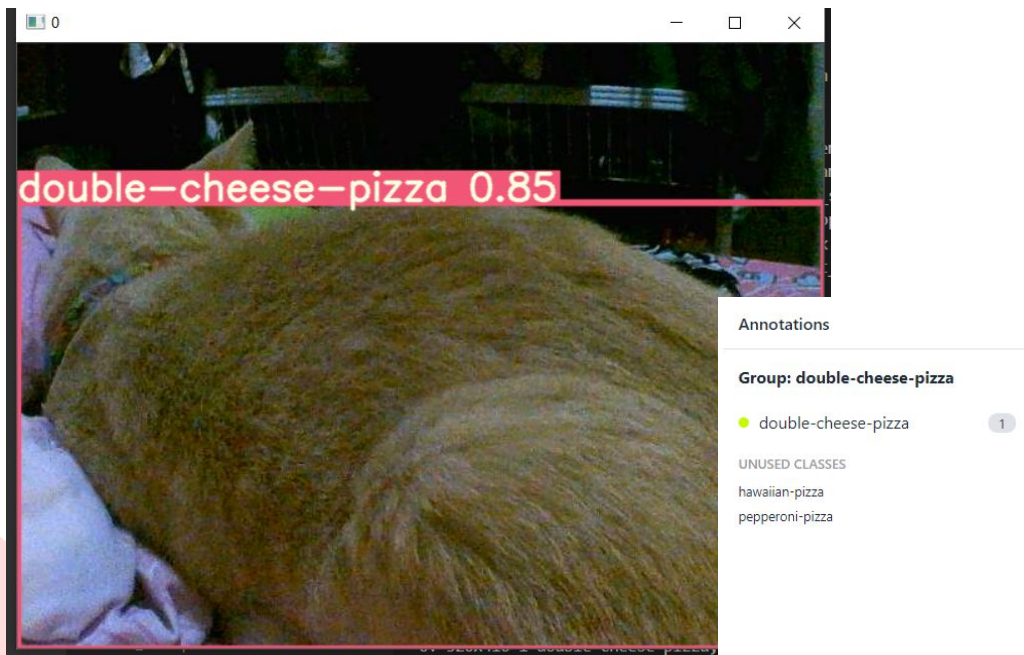
*Environment  
Complexity*



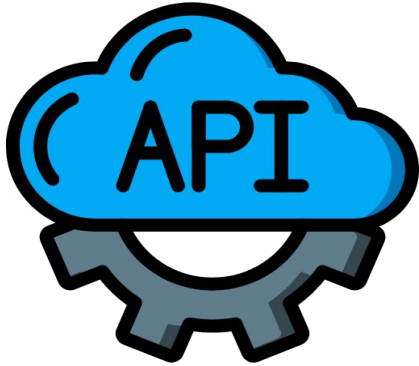
*Garbage in  
Garbage out*



# Obstacles Example



# *Continuity approach and Challenge*



*Deploy with  
Cloud API*



*More Classes*



*More  
Correctness*



# ***THANKS!***

***DO YOU HAVE ANY QUESTIONS?***

