DEEP LEARNING PRESENTATION

아보카도 팀

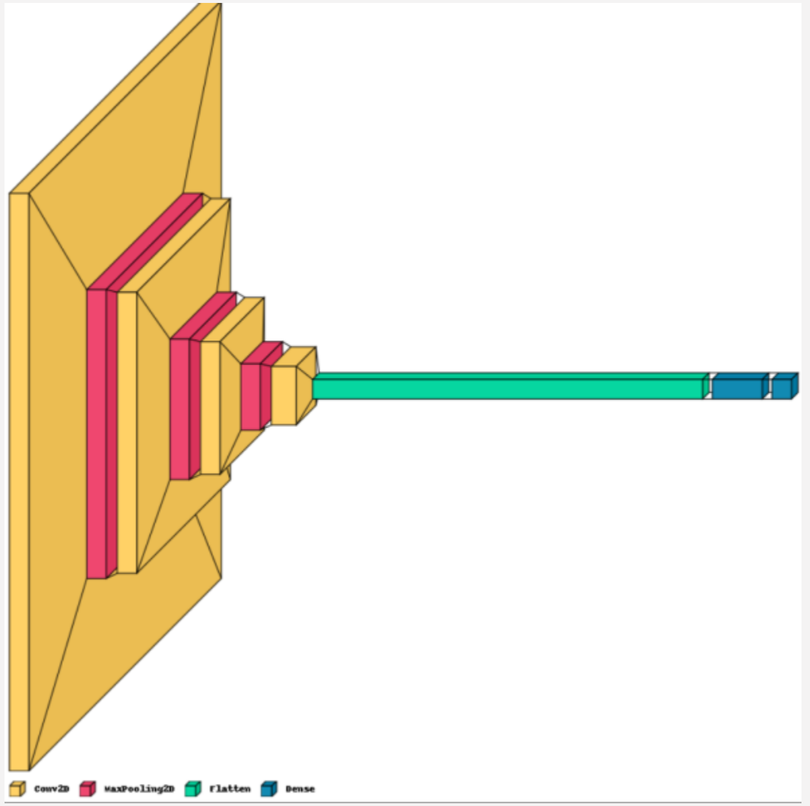
CONTENTS

목차

- **손상된 이미지 파일 제거** **CAT666.JPG**
  DOG11702.JPG

1. CNN

- **MODELING**



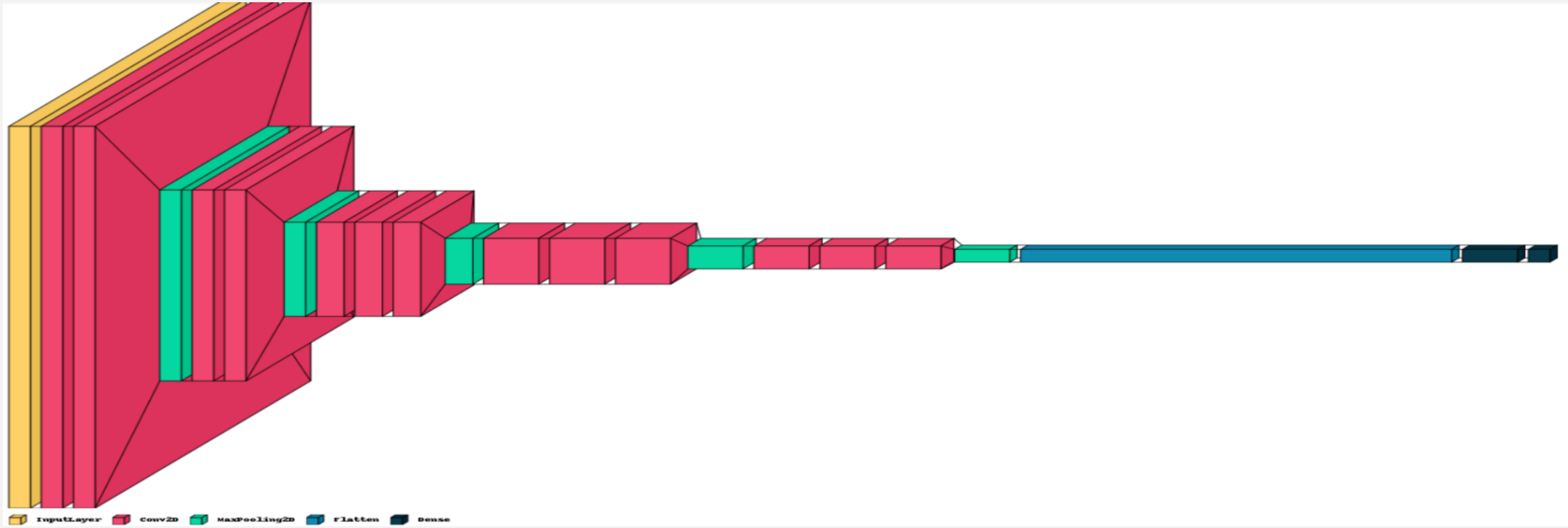

```
Model: "sequential_3"
_________________________________________________________________
 Layer (type)                Output Shape              Param #
=================================================================
 conv2d_12 (Conv2D)          (None, 148, 148, 32)      896

 max_pooling2d_9 (MaxPoolin  (None, 74, 74, 32)        0
 g2D)

 conv2d_13 (Conv2D)          (None, 72, 72, 64)        18496

 max_pooling2d_10 (MaxPooli  (None, 36, 36, 64)        0
 ng2D)

 conv2d_14 (Conv2D)          (None, 34, 34, 128)       73856

 max_pooling2d_11 (MaxPooli  (None, 17, 17, 128)       0
 ng2D)

 conv2d_15 (Conv2D)          (None, 15, 15, 256)       295168

 flatten_3 (Flatten)         (None, 57600)             0

 dense_6 (Dense)             (None, 512)               29491712

 dense_7 (Dense)             (None, 1)                 513

=================================================================
Total params: 29880641 (113.99 MB)
Trainable params: 29880641 (113.99 MB)
Non-trainable params: 0 (0.00 Byte)
_________________________________________________________________
```

1. CNN

- **ACCURACY: 0.87**

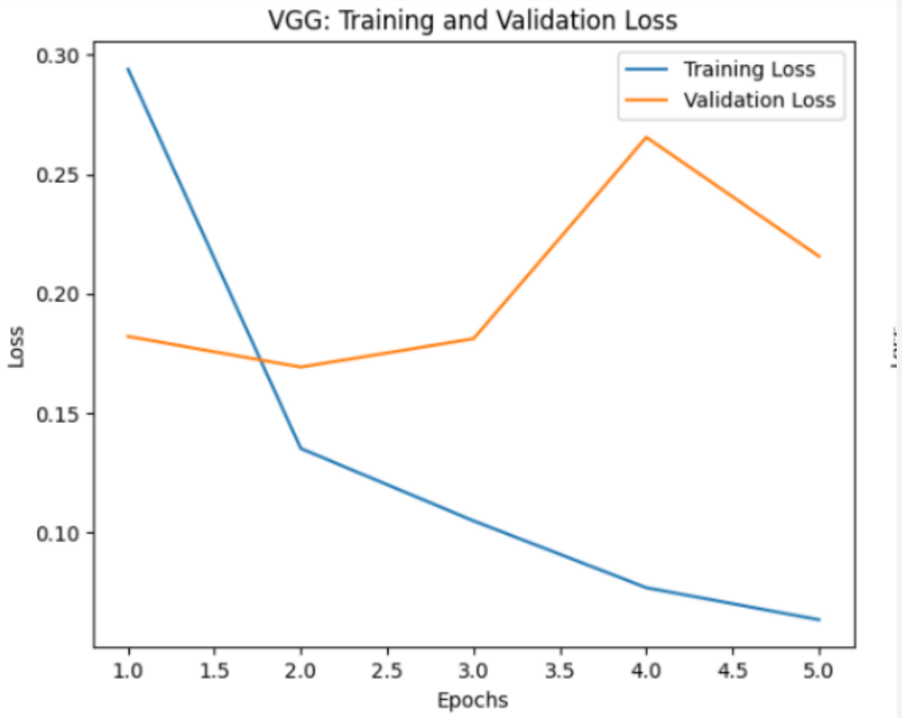
2. VGG16

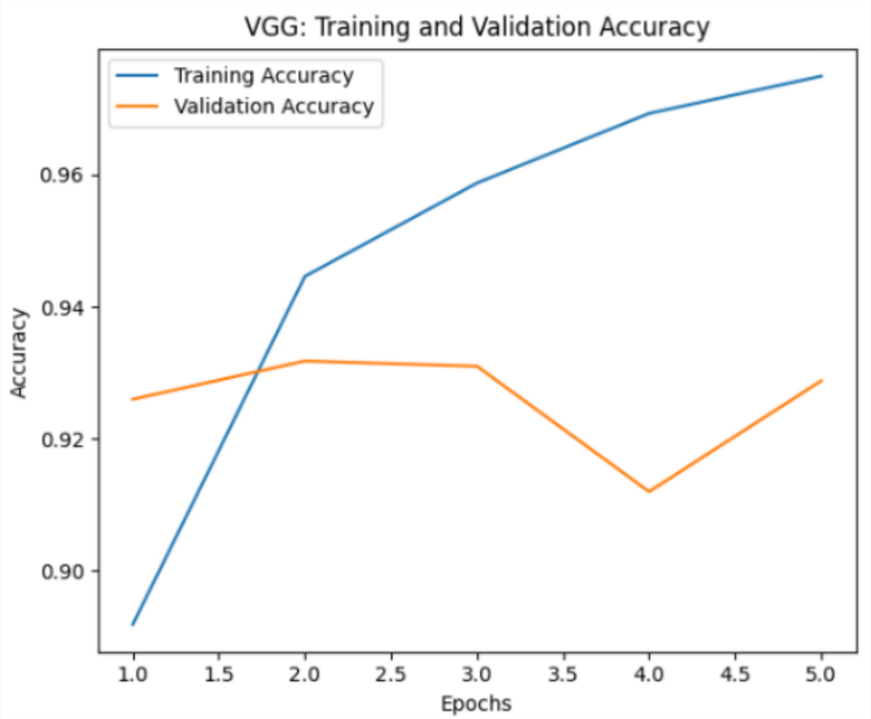
- **MODELING**



2. VGG16

- **ACCURACY: 0.96**
- **TRAIN / VAL 큰 차이 존재**





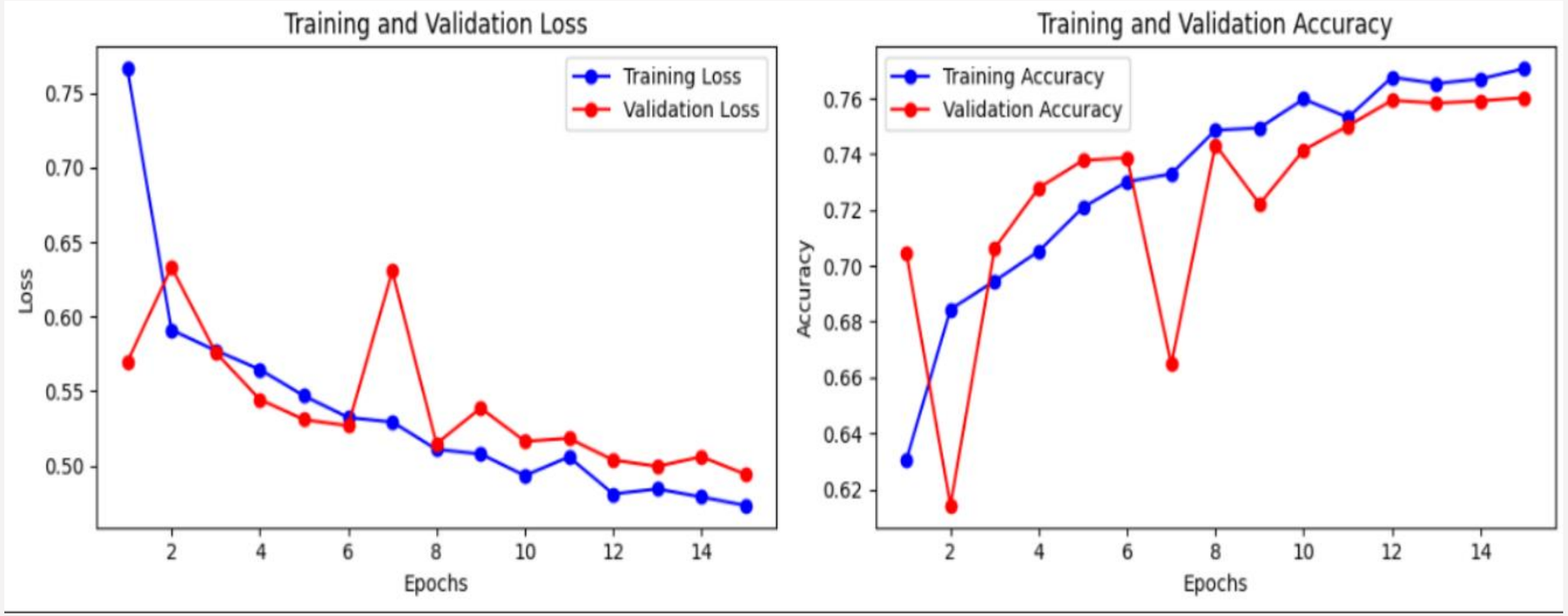
3.RESNET

- **MODELING**

```
Model: "sequential_11"
_________________________________________________________________
 Layer (type)                Output Shape              Param #
=================================================================
 resnet50 (Functional)       (None, 7, 7, 2048)        23587712

 flatten_11 (Flatten)        (None, 100352)            0

 dense_22 (Dense)            (None, 256)               25690368

 dense_23 (Dense)            (None, 1)                 257

=================================================================
Total params: 49278337 (187.98 MB)
Trainable params: 25690625 (98.00 MB)
Non-trainable params: 23587712 (89.98 MB)
```

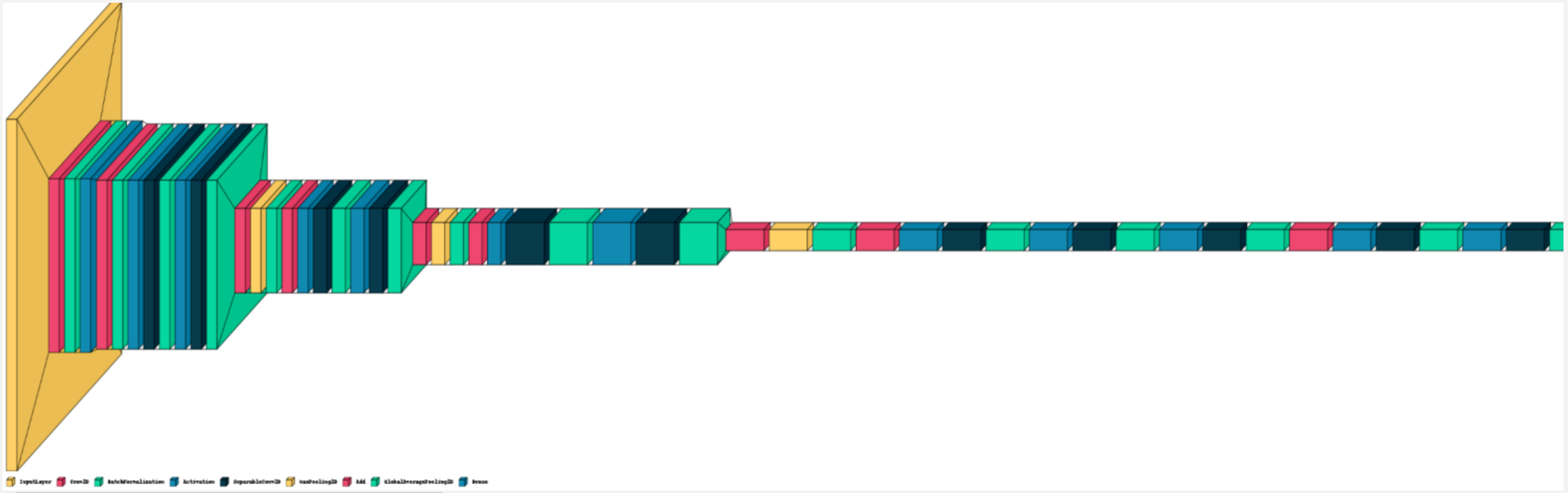
3.RESNET

- **ACCURACY: 0.77**
- **가장 낮은 성능을 보임**



2.XCEPTION

- 이미지 분류, 객체 감지, 세분화 등의 컴퓨터 비전 태스크에 적용
- 학습 데이터셋이 많은 경우에 효과적인 모델



2.EXCEPTION

- **ACCURACY : 0.99 (EPOCH=5)**
- **가장 높은 성능을 보임**