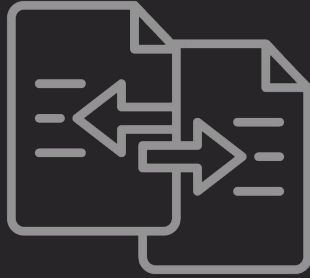




## Module 2: Building Blocks for Image Recognition

### Video 7: Image Augmentation

# Introduction



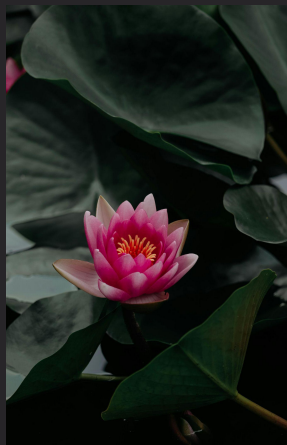
Transfer Learning



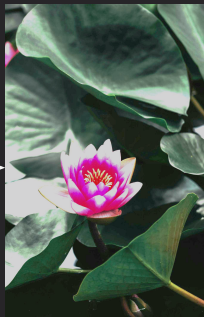
Image Augmentation

# Image Augmentation

- Artificially expand the size and diversity of training dataset.
- Helps prevent overfitting by introducing variations.
- Applied on the training set only.



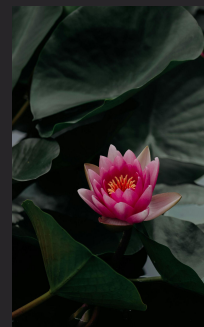
Original Image



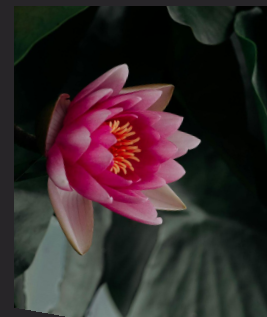
Bright



Zoomed

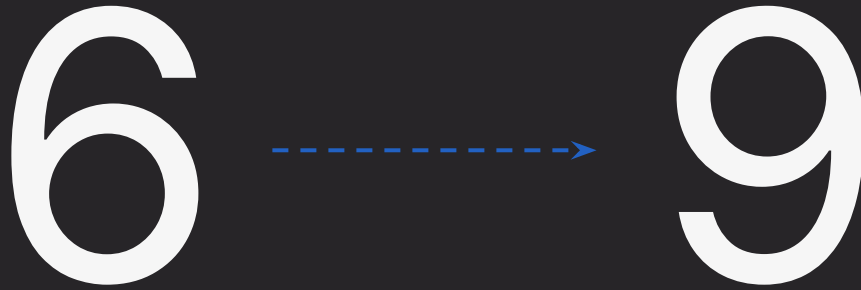


Flipped



Rotated

# Image Augmentation: Points to Consider



Original Image:  
Six

Augmented Image:  
Nine

# Image Augmentation: Points to Consider



**Original Image:**  
Fresh Green Crops



**Augmented Image:**  
Yellow Dried Crops

# Image Augmentation: Points to Consider



**Original Image:**  
Fracture (Left Hand)



**Augmented Image:**  
Fracture (Right Hand)

**UpNext:** Hands-on: VGG with Image Augmentation



What if we do not have a pre-trained model and less data to train a new model from scratch?

**Image Augmentation**