

Copyright Notice

These slides are distributed under the Creative Commons License.

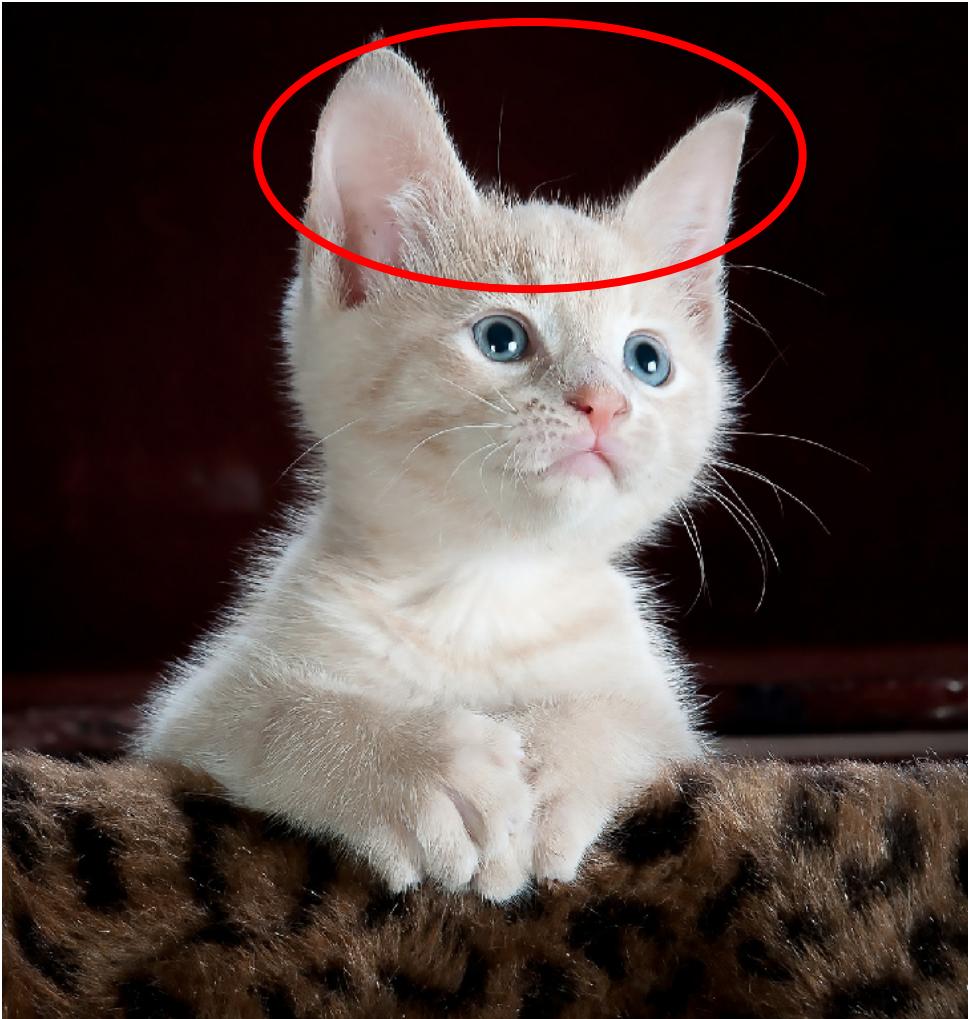
DeepLearning.AI makes these slides available for educational purposes. You may not use or distribute these slides for commercial purposes. You may make copies of these slides and use or distribute them for educational purposes as long as you cite DeepLearning.AI as the source of the slides.

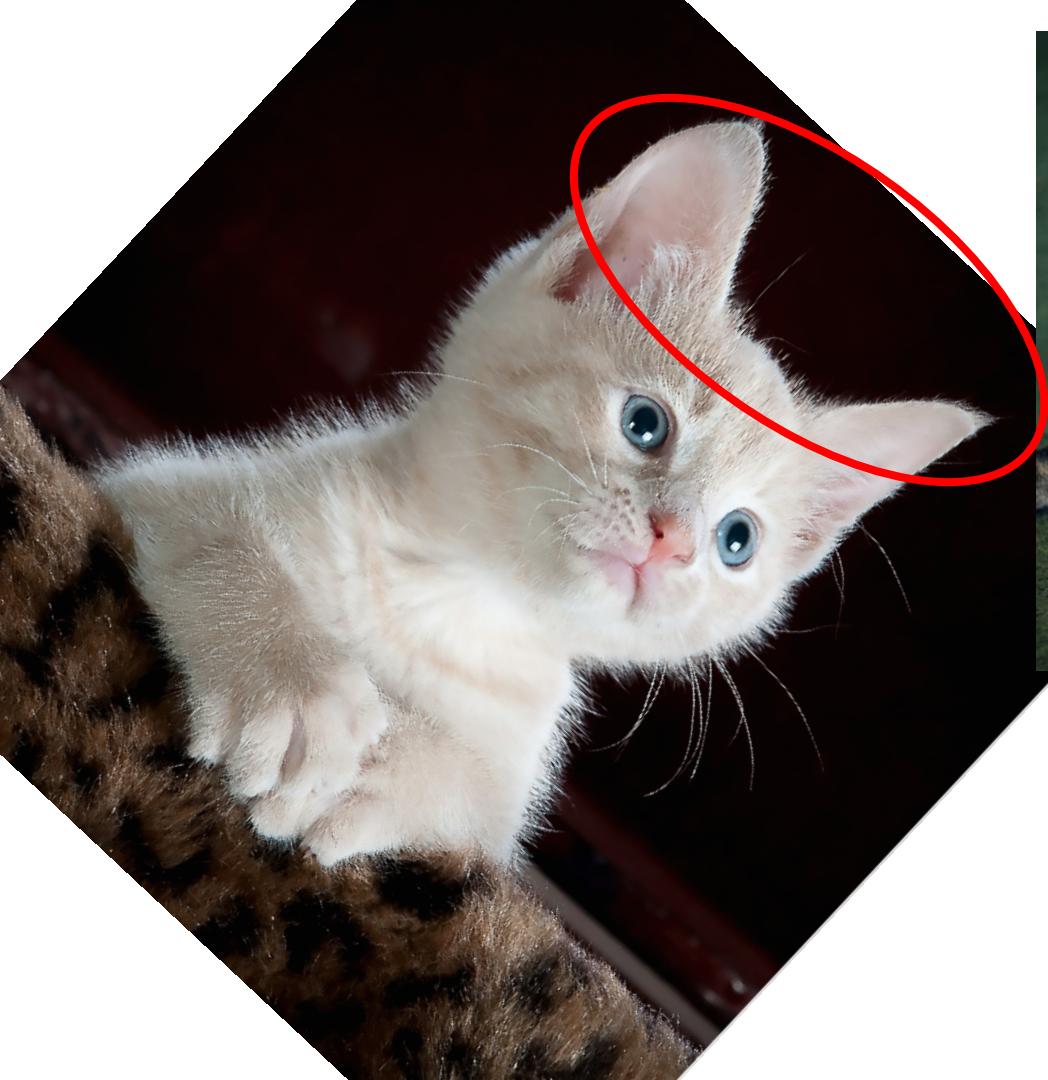
For the rest of the details of the license, see <https://creativecommons.org/licenses/by-sa/2.0/legalcode>











```
train_datagen = ImageDataGenerator(rescale=1./255)
```

```
train_datagen = ImageDataGenerator(rescale=1./255)
```

```
# Updated to do image augmentation
```

```
train_datagen = ImageDataGenerator(
```

```
    rescale=1./255,
```

```
    rotation_range=40,
```

```
    width_shift_range=0.2,
```

```
    height_shift_range=0.2,
```

```
    shear_range=0.2,
```

```
    zoom_range=0.2,
```

```
    horizontal_flip=True,
```

```
    fill_mode='nearest')
```

```
# Updated to do image augmentation
```

```
train_datagen = ImageDataGenerator(
```

```
    rescale=1./255,
```

```
    rotation_range=40,
```

```
    width_shift_range=0.2,
```

```
    height_shift_range=0.2,
```

```
    shear_range=0.2,
```

```
    zoom_range=0.2,
```

```
    horizontal_flip=True,
```

```
    fill_mode='nearest')
```

```
# Updated to do image augmentation
```

```
train_datagen = ImageDataGenerator(
```

```
    rescale=1./255,
```

```
    rotation_range=40,
```

```
    width_shift_range=0.2,
```

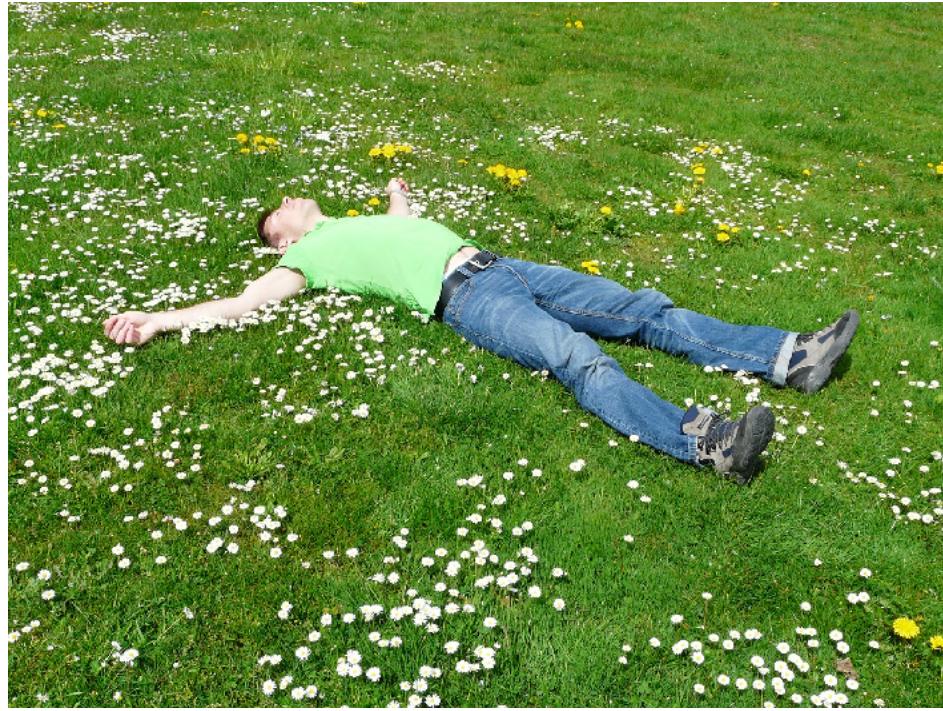
```
    height_shift_range=0.2,
```

```
    shear_range=0.2,
```

```
    zoom_range=0.2,
```

```
    horizontal_flip=True,
```

```
    fill_mode='nearest')
```





```
# Updated to do image augmentation
```

```
train_datagen = ImageDataGenerator(
```

```
    rescale=1./255,
```

```
    rotation_range=40,
```

```
    width_shift_range=0.2,
```

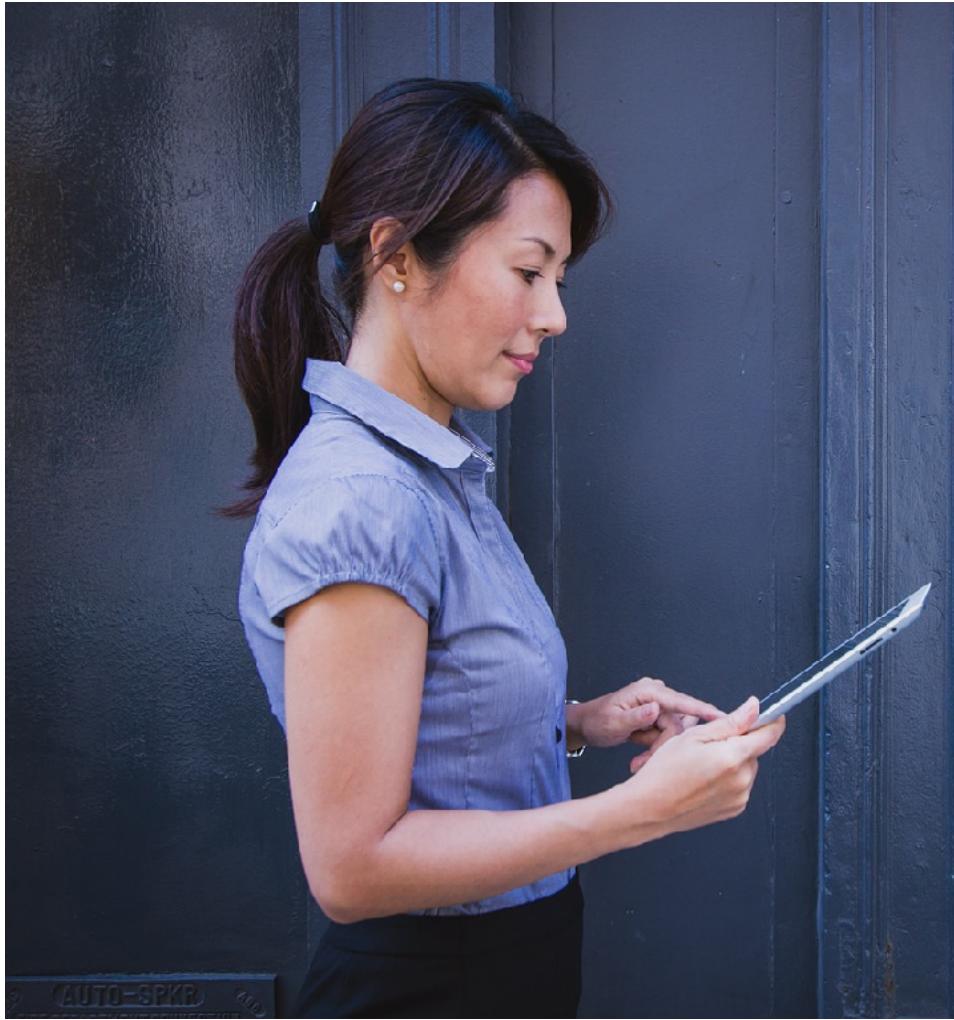
```
    height_shift_range=0.2,
```

```
    shear_range=0.2,
```

```
    zoom_range=0.2,
```

```
    horizontal_flip=True,
```

```
    fill_mode='nearest')
```





```
# Updated to do image augmentation
```

```
train_datagen = ImageDataGenerator(
```

```
    rescale=1./255,
```

```
    rotation_range=40,
```

```
    width_shift_range=0.2,
```

```
    height_shift_range=0.2,
```

```
    shear_range=0.2,
```

```
    zoom_range=0.2,
```

```
    horizontal_flip=True,
```

```
    fill_mode='nearest')
```





```
# Updated to do image augmentation
```

```
train_datagen = ImageDataGenerator(
```

```
    rescale=1./255,
```

```
    rotation_range=40,
```

```
    width_shift_range=0.2,
```

```
    height_shift_range=0.2,
```

```
    shear_range=0.2,
```

```
    zoom_range=0.2,
```

```
    horizontal_flip=True,
```

```
    fill_mode='nearest')
```

```
# Updated to do image augmentation
```

```
train_datagen = ImageDataGenerator(
```

```
    rescale=1./255,
```

```
    rotation_range=40,
```

```
    width_shift_range=0.2,
```

```
    height_shift_range=0.2,
```

```
    shear_range=0.2,
```

```
    zoom_range=0.2,
```

```
    horizontal_flip=True,
```

```
    fill_mode='nearest')
```