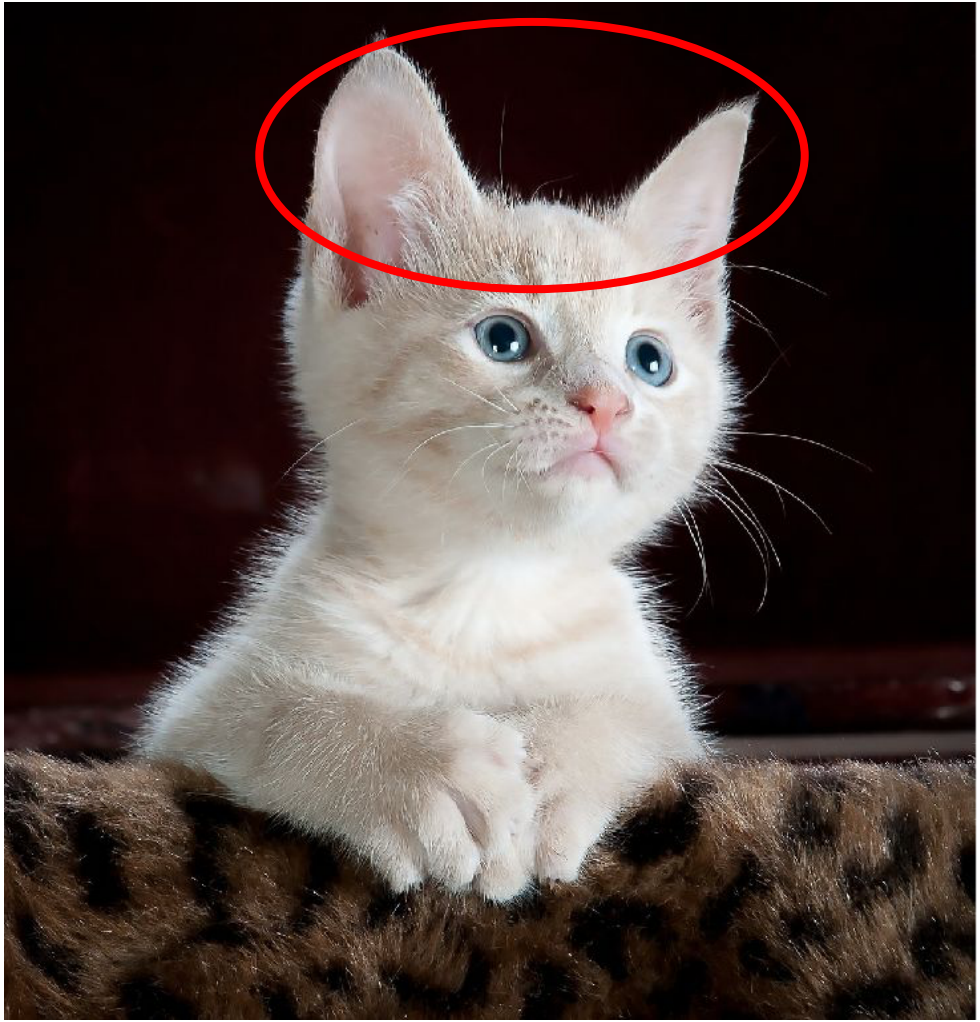

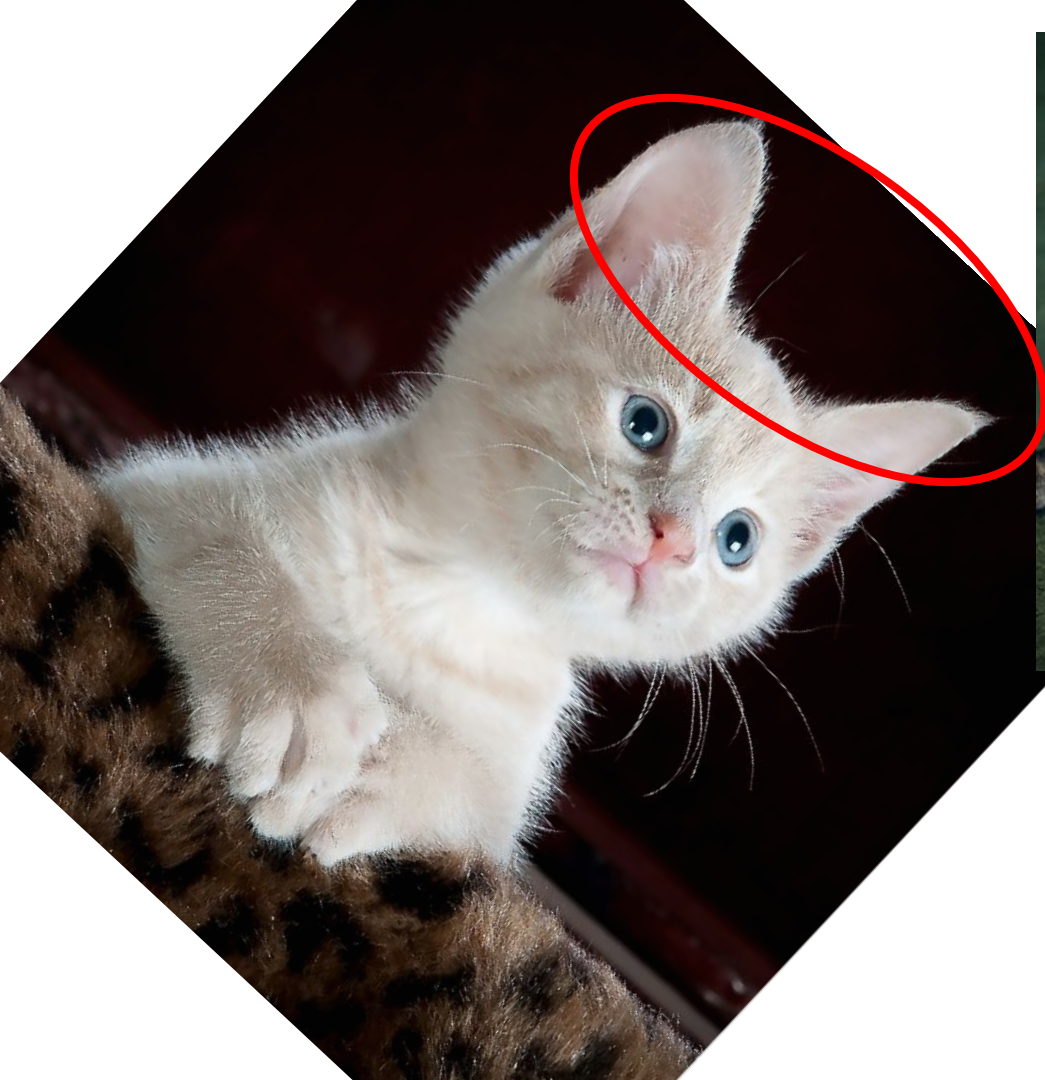

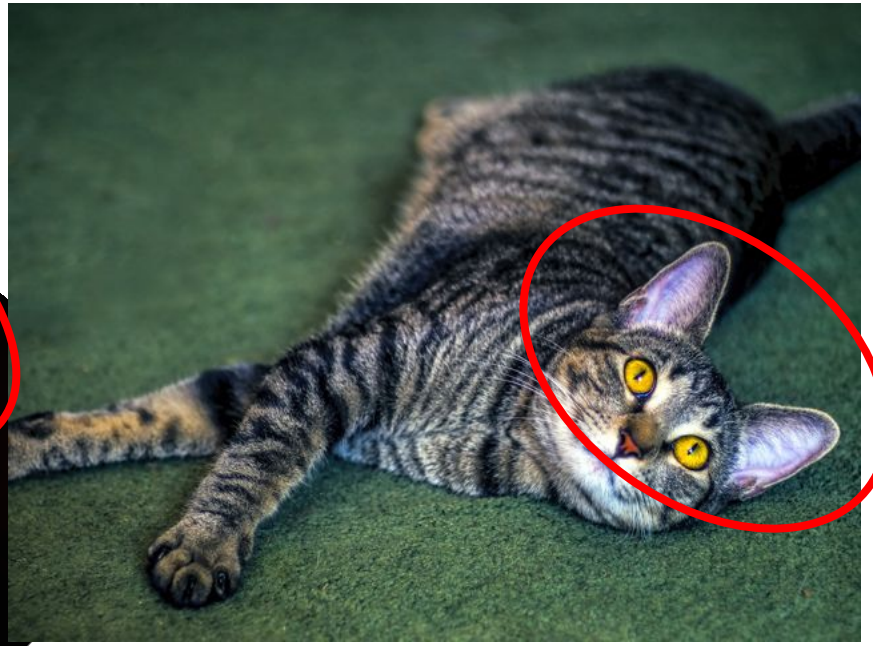

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train_dataset = tf.keras.utils.image_dataset_from_directory(
    train_dir,
    image_size=(150, 150),
    batch_size=20,
    label_mode='binary')

SHUFFLE_BUFFER_SIZE = 1000
PREFETCH_BUFFER_SIZE = tf.data.AUTOTUNE

train_dataset_final = (train_dataset
                       .cache()
                       .shuffle(SHUFFLE_BUFFER_SIZE)
                       .prefetch(buffer_size=AUTOTUNE))
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data_augmentation = tf.keras.Sequential([
    tf.keras.Input(shape=(150, 150, 3)),
    tf.keras.layers.RandomFlip('horizontal'),
    tf.keras.layers.RandomRotation(0.2, fill_mode='nearest'),
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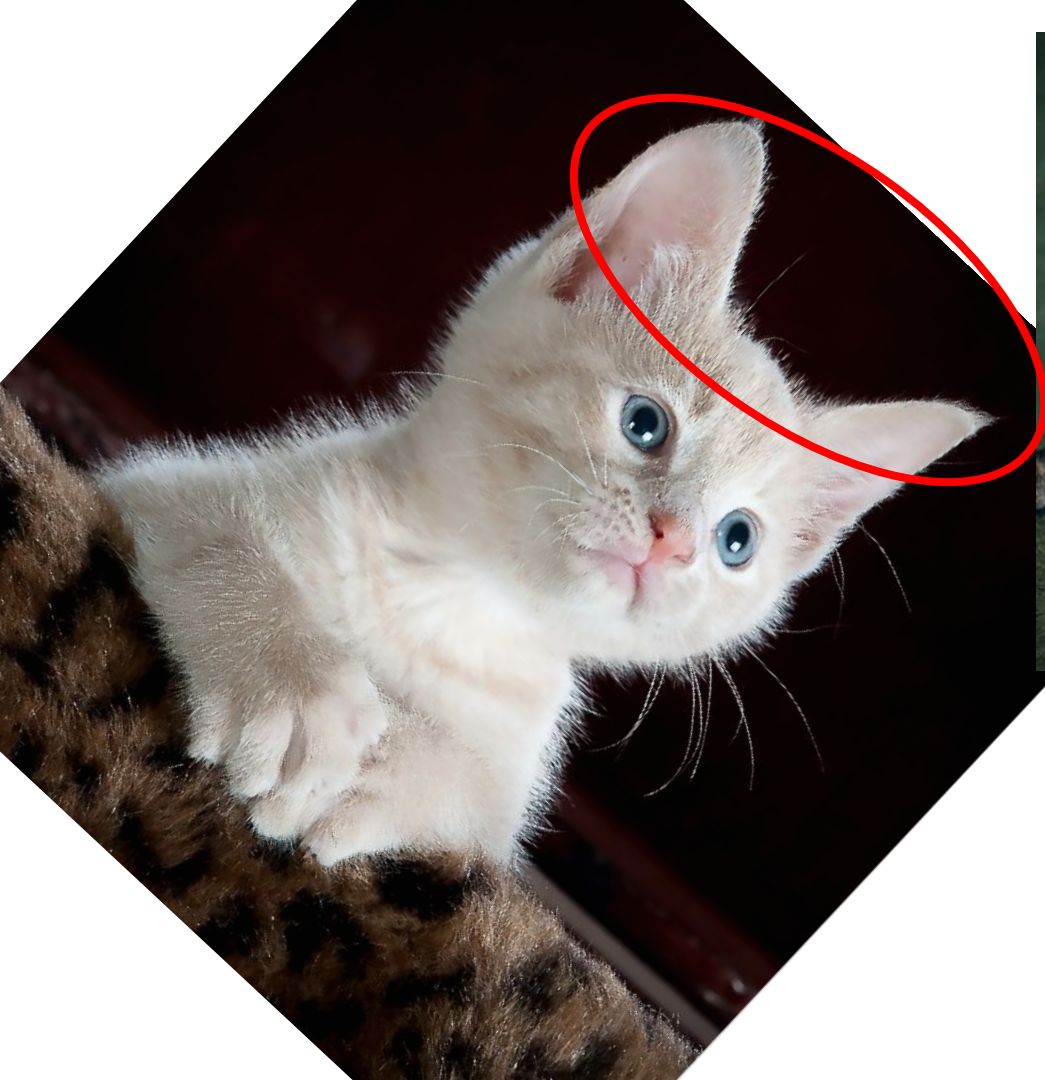

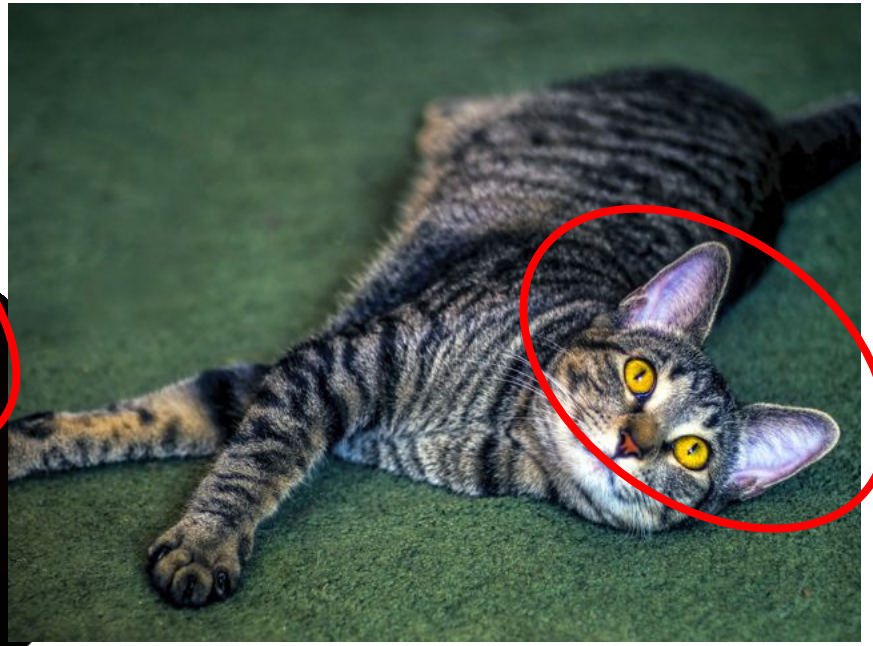

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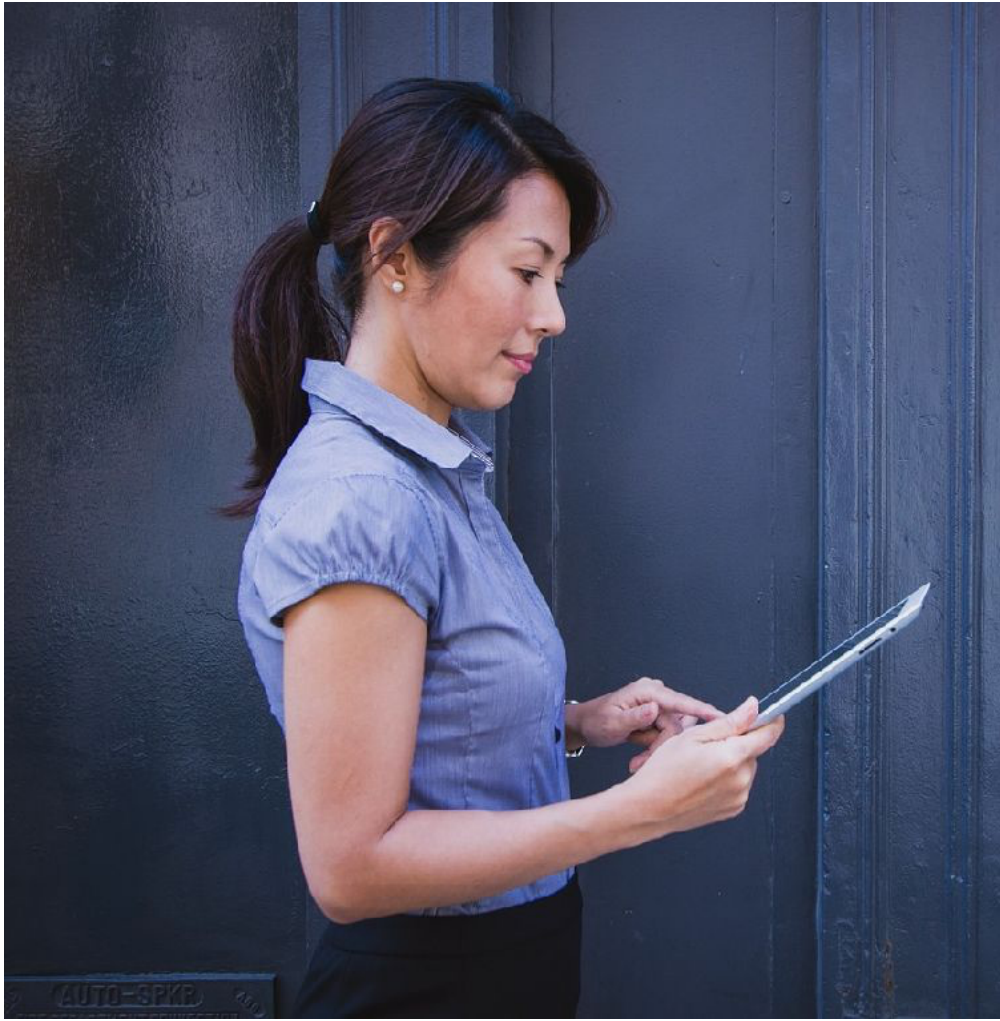
AUTO-SPKR


UTO-SPKR

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model_without_aug = create_model()

model_with_aug = tf.keras.models.Sequential([
    data_augmentation,
    model_without_aug
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    optimizer=tf.keras.optimizers.RMSprop(learning_rate=1e-4),
    metrics=['accuracy']
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