```
#VAISHNAVI SOLANKAR
#MY PROGRAM
from keras.preprocessing.image import load_img
from keras.preprocessing.image import img_to_array
from keras.applications.resnet50 import preprocess_input
from keras.applications.resnet50 import decode_predictions
from keras.applications.resnet50 import ResNet50
from keras.utils import plot_model
```

```
image=load_img('/th (3).jpg',target_size=(224,224))
```

```
image
```

```
image=img_to_array(image)
```

```
image
```

```
array([[[135., 140., 146.],
        [133., 138., 144.],
        [130., 135., 141.],
        ...,
        [120., 125., 131.],
        [121., 126., 132.],
        [122., 127., 133.]],

       [[133., 138., 144.],
        [130., 135., 141.],
        [127., 132., 138.],
        ...,
        [120., 125., 131.],
        [121., 126., 132.],
        [122., 127., 133.]],

       [[130., 135., 141.],
        [127., 132., 138.],
        [125., 130., 136.],
        ...,
        [119., 124., 130.],
        [120., 125., 131.],
        [122., 127., 133.]],

       ...,

       [[147., 151., 162.],
        [144., 148., 159.],
        [142., 146., 157.],
        ...,
        [128., 132., 143.],
        [128., 132., 143.],
        [129., 133., 144.]],

       [[147., 151., 162.],
        [145., 149., 160.],
        [143., 147., 158.],
        ...,
        [128., 132., 143.],
        [129., 133., 144.],
        [130., 134., 145.]],

       [[147., 151., 162.],
        [145., 149., 160.],
        [143., 147., 158.],
        ...,
        [128., 132., 143.],
        [129., 133., 144.],
        [131., 135., 146.]]], dtype=float32)
```

```
#reshape data for the model
image=image.reshape((1,image.shape[0],image.shape[1],image.shape[2]))
```

```
image.shape
```

```
(1, 224, 224, 3)
```

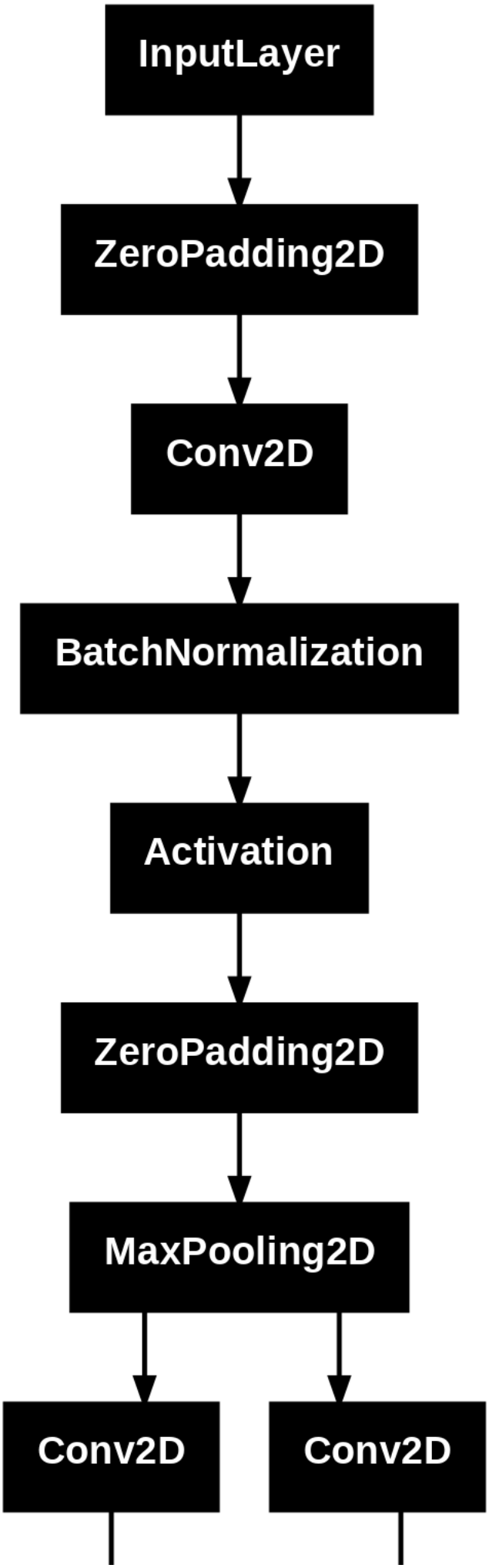
```
#prepare the image for the ResNet50 model
image=preprocess_input(image)
```

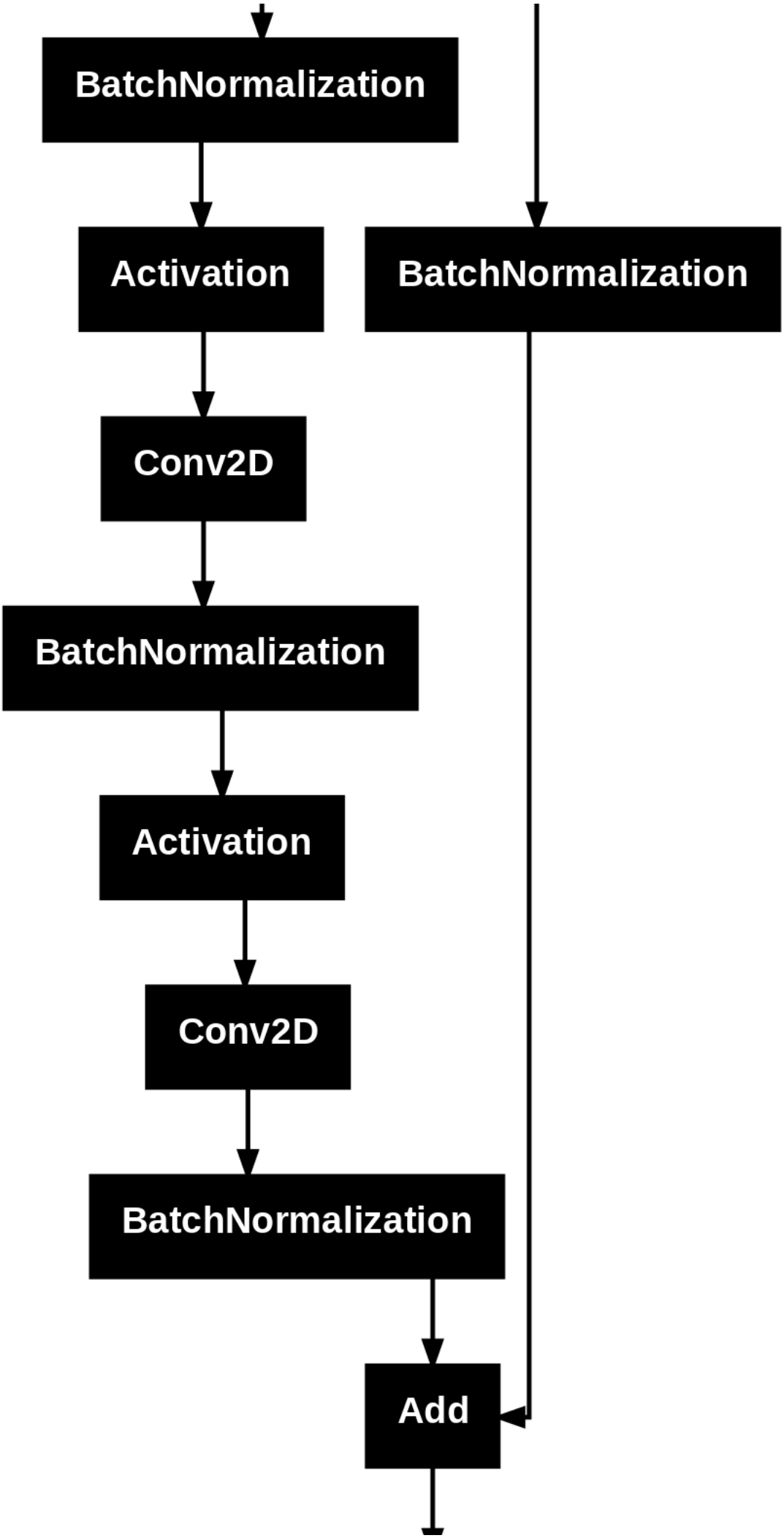
```
#load the model
model=ResNet50()
```

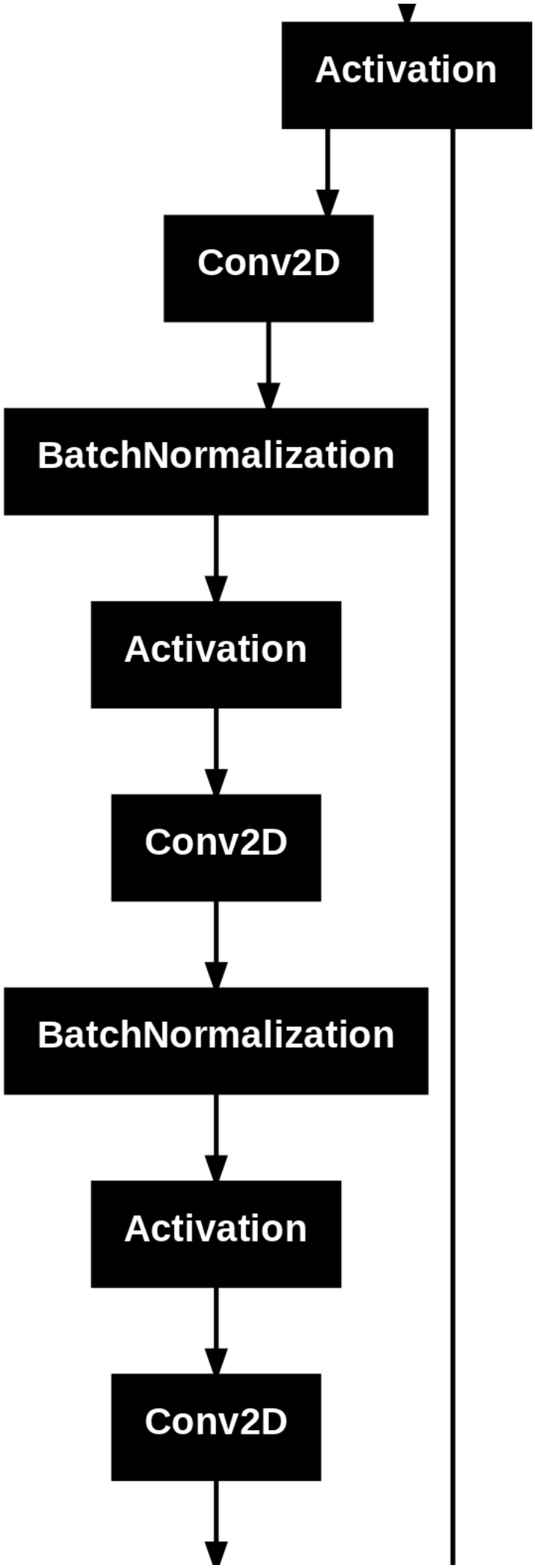
```
Downloading data from https://storage.googleapis.com/tensorflow/keras-applications/resnet/resnet50_weights_tf_dim_ordering_tf_kernel
102967424/102967424 ━━━━━━━━━━━━━━━━━━━━ 0s 0us/step
```

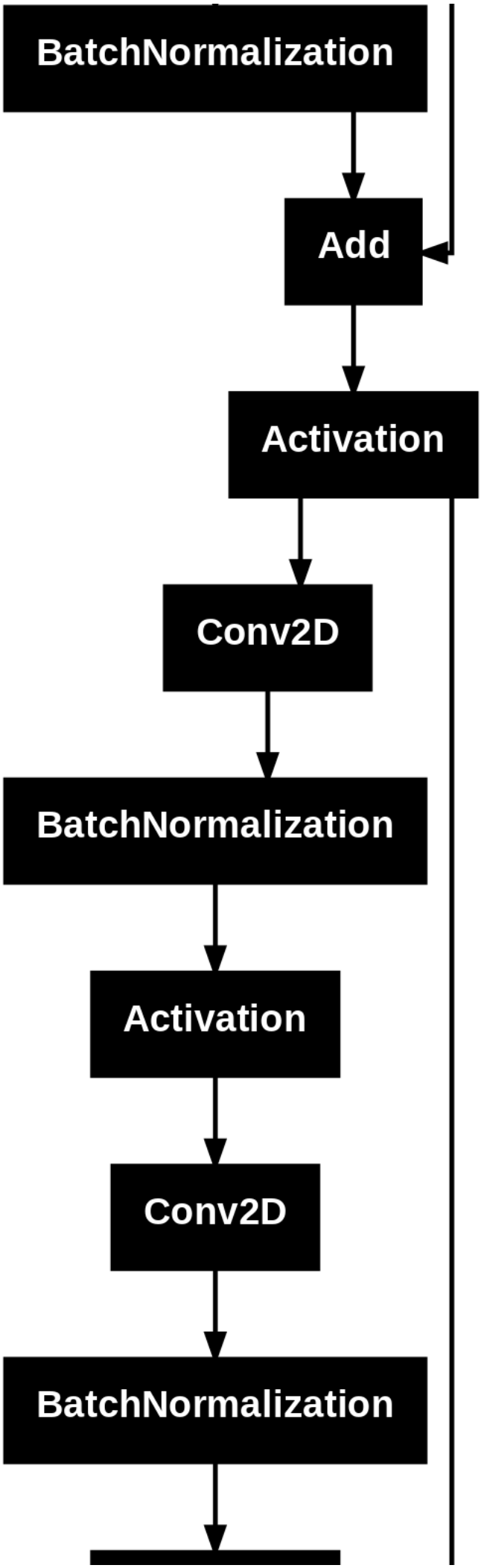
```
plot_model(model)
```

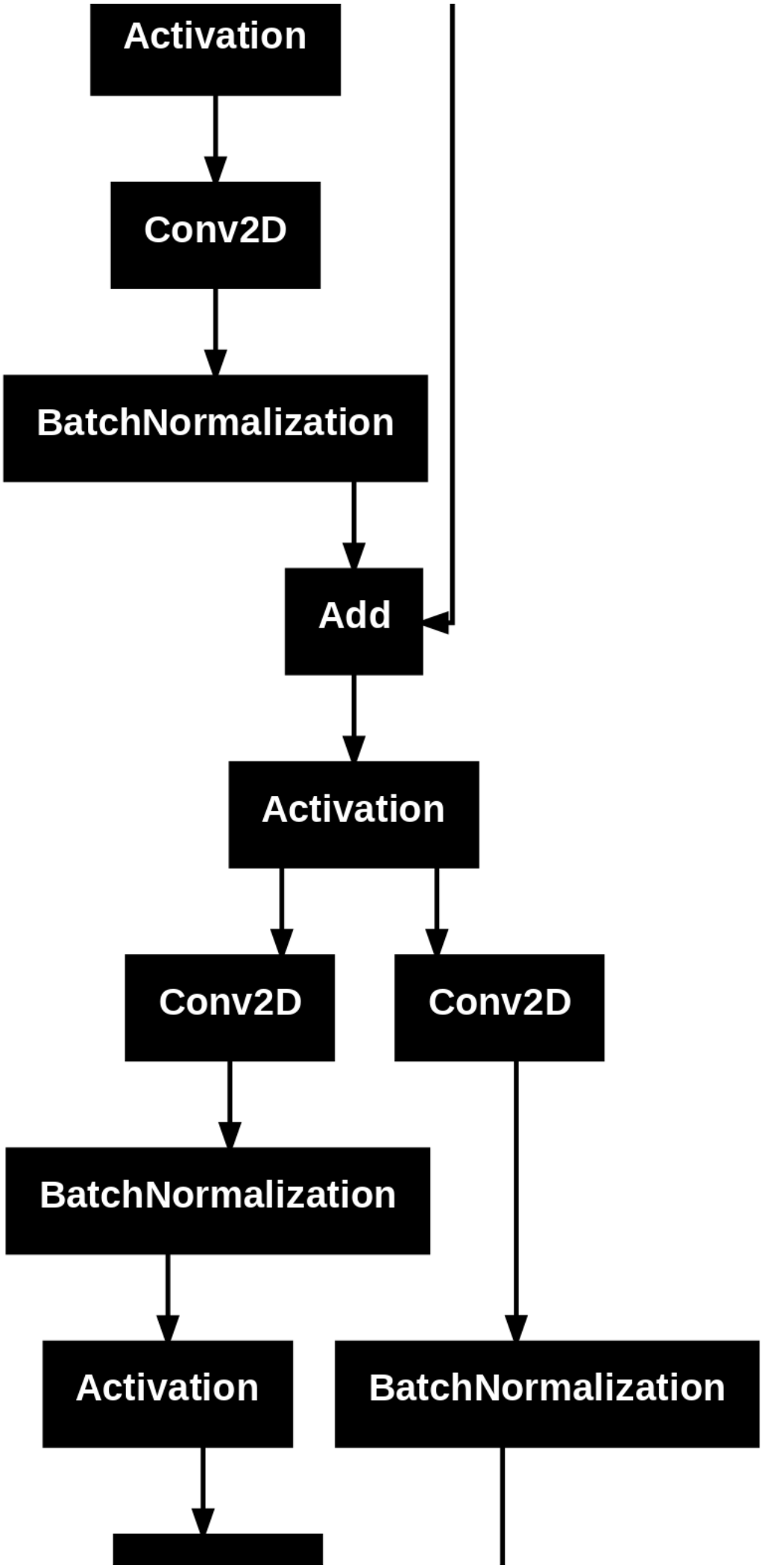
dot: graph is too large for cairo-renderer bitmaps. Scaling by 0.869494 to fit




BatchNormalization
Activation
BatchNormalization
Conv2D
BatchNormalization
Activation
Conv2D
BatchNormalization
Add


Activation
Conv2D
BatchNormalization
Activation
Conv2D
BatchNormalization
Activation
Conv2D


BatchNormalization
Add
Activation
Conv2D
BatchNormalization
Activation
Conv2D
BatchNormalization


Activation
Conv2D
BatchNormalization
Add
Activation
Conv2D
Conv2D
BatchNormalization
Activation
BatchNormalization