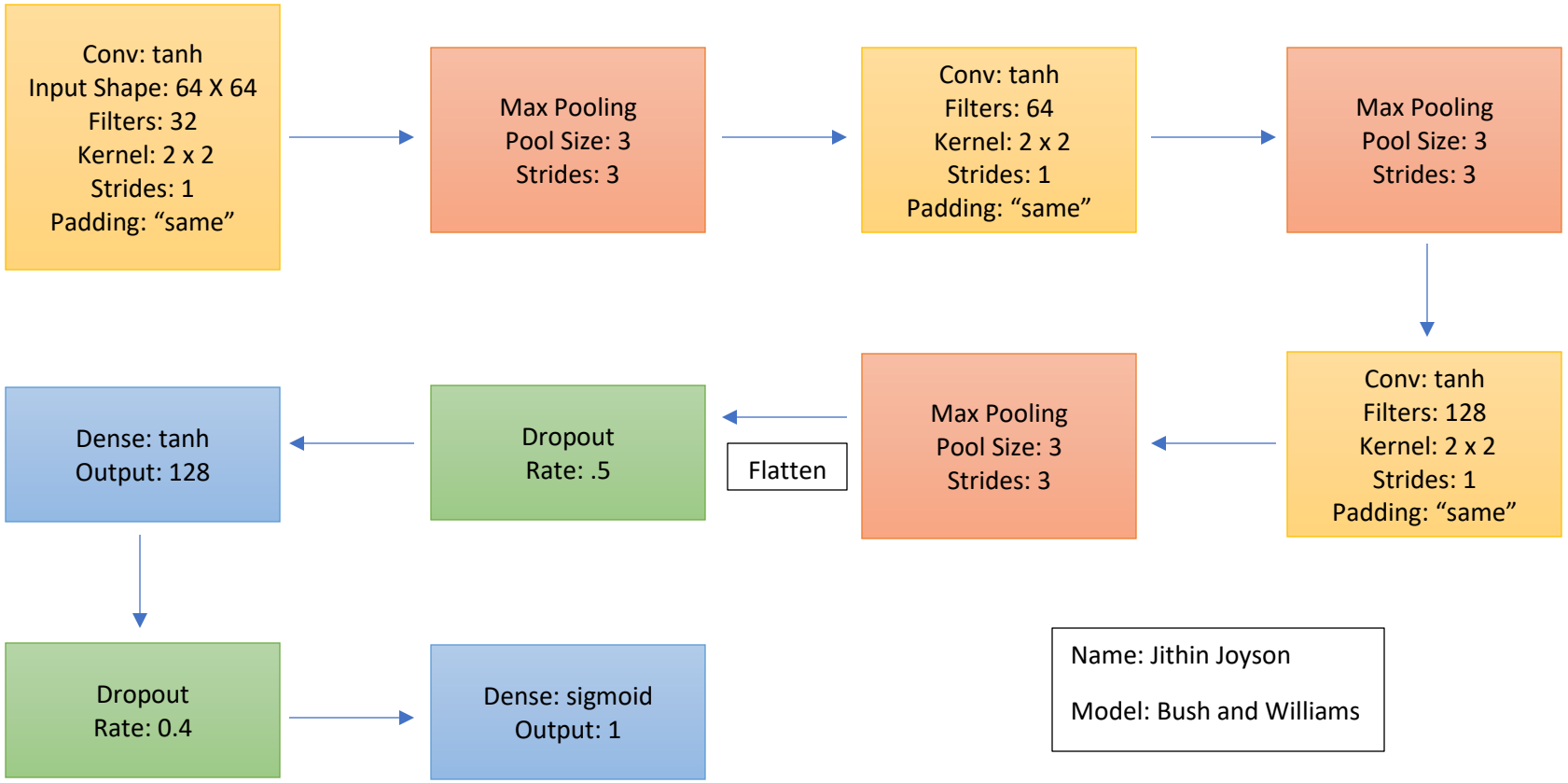
Bush and Williams Sequential Convolution Neural Networks Model



Several Loops were run trying to find a model that outputted a f1 score of 1.0 on the train data and the highest f1 score on the test data. Parameters that were tested are listed out in each layer or step. Ranges of values included a combination of the following:

Activation Function: {tanh, relu, softmax, sigmoid}	Note: Combination of these for the 4 different instances (3 CONV and 1 Dense)
Kernel: {3, 4, 5}	
Filters: {32, 64, 128, 256}	Note: The next filter would be larger than the previous (3 CONV)
Pool Size: {3, 4, 5}	
Dropout Rate: {.1,.2,.3,.4,.5,.6,.7,.8,.9}	Note: This step was added to combat overfitting the data
Loss: {binary_crossentropy, poisson}	Note: This was a parameter in the compile step and **binary_crossentropy** was the best

The Input Shape was (64,64,**1**) where **1** specified that the images were grayscale.
Both the Bush and Williams models happened to have the largest test f1 score with the same model as above when the train f1 score was the largest (1.0).