

ADD LAYER

TEAM ID	PNT2022TMID52124
PROJECT NAME	Digital Naturalist - AI Enabled tool for Biodiversity Researchers

""Add_layers

Automatically generated by Colaboratory.

Original file is located at

https://colab.research.google.com/drive/1JFk8B_gpoqPdNlD86TTiXzLmW5vjU-xp

"""

""""This function defines the cnn model structure and configures the layers""""

def load_CNN(output_size):

K.clear_session()

model = Sequential()

model.add(Dropout(0.4,input_shape=(224, 224, 3)))

model.add(Conv2D(256, (5, 5),input_shape=(224, 224, 3),activation='relu'))

model.add(MaxPool2D(pool_size=(2, 2)))

#model.add(BatchNormalization())

model.add(Conv2D(128, (3, 3), activation='relu'))

model.add(MaxPool2D(pool_size=(2, 2)))

#model.add(BatchNormalization())

model.add(Conv2D(64, (3, 3), activation='relu'))

model.add(MaxPool2D(pool_size=(2, 2)))

#model.add(BatchNormalization())

model.add(Flatten())

model.add(Dense(512, activation='relu'))

model.add(Dropout(0.3))

model.add(Dense(256, activation='relu'))

model.add(Dropout(0.3))

model.add(Dense(128, activation='relu'))

model.add(Dropout(0.3))

model.add(Dense(output_size, activation='softmax'))