

EXPLANATION OF DEEP NEURAL NETWORK USED IN DIGIT RECOGNIZER:-

I BUILT DIGIT RECOGNIZER (0 TO 9) BY CREATING DEEP NEURAL NETWORK FOR THIS PURPOSE I USED TENSORFLOW (KERAS) FOR THE CREATION OF LAYER,I HAD DEFINED THE UNIT OF LAYER AND ACTIVATION FUNCTION USED IN EACH LAYER FOR UPDATION.

THOUGH THIS COULD ALSO BE CREATED USING ONE HIDDEN LAYER AND WRITING EACH FUNCTION SEPARATELY AND CREATING FUNCTION OF MATHEMATICAL THEORY USED FOR FORWARD AND BACKWARD PROPAGATION(SO FOR PRESENTING KNOWLEDGE OF IT I HAD ALSO ADDED A SIMPLE NEURAL NETWORK WITHOUT ANY LIBRARY IN MY REPO)

**ALSO I HAD LEARNED THEORY FOR NEURAL NETWORK THROUGH AUDITING COURSE DEEP LEARNING COURSE OF ANDREW NG IN COURSERA AND COMPLETING (IN LAST 6-7 DAYS)

** THOUGH I AM STILL LEARNING MORE ABOUT TENSORFLOW ,I USED FOLLOWING RESOURCE TO HELP WRITE CODE FOR CREATING LAYERS AND COMPILING IT USING TENSORFLOW

I HAD ALSO EXPLAINED THEORY IN THE COMMENTS OF BOTH THE CODE BUT I WILL ALSO ADD ONE HAND WRITTEN FLOWCHART AND LITTLE MATHS TO SHOWCASE MY KNOWLEDGE.

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