tracking <tf.Variable 'neural\_tensor\_layer\_2/Variable:0' shape=(64, 540, 540) dtype=float32> W

tracking <tf.Variable 'neural\_tensor\_layer\_2/Variable:0' shape=(1080, 64) dtype=float32> V

tracking <tf.Variable 'neural\_tensor\_layer\_2/Variable:0' shape=(540,) dtype=float32> b

Model: "model\_2"

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Layer (type) Output Shape Param # Connected to

==================================================================================================

input\_3 (InputLayer) (None, 45, 768) 0

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input\_4 (InputLayer) (None, 45, 768) 0

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bidirectional\_3 (Bidirectional) (None, 45, 256) 918528 input\_3[0][0]

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bidirectional\_4 (Bidirectional) (None, 45, 256) 918528 input\_4[0][0]

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time\_distributed\_3 (TimeDistrib (None, 45, 128) 32896 bidirectional\_3[0][0]

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time\_distributed\_4 (TimeDistrib (None, 45, 128) 32896 bidirectional\_4[0][0]

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dropout\_5 (Dropout) (None, 45, 128) 0 time\_distributed\_3[0][0]

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dropout\_6 (Dropout) (None, 45, 128) 0 time\_distributed\_4[0][0]

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seq\_self\_attention\_3 (SeqSelfAt (None, 45, 128) 8257 dropout\_5[0][0]

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seq\_self\_attention\_4 (SeqSelfAt (None, 45, 128) 8257 dropout\_6[0][0]

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dense\_11 (Dense) (None, 45, 12) 1548 seq\_self\_attention\_3[0][0]

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dense\_12 (Dense) (None, 45, 12) 1548 seq\_self\_attention\_4[0][0]

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dropout\_7 (Dropout) (None, 45, 12) 0 dense\_11[0][0]

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dropout\_8 (Dropout) (None, 45, 12) 0 dense\_12[0][0]

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flatten\_3 (Flatten) (None, 540) 0 dropout\_7[0][0]

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flatten\_4 (Flatten) (None, 540) 0 dropout\_8[0][0]

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dense\_13 (Dense) (None, 50) 27050 flatten\_3[0][0]

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neural\_tensor\_layer\_2 (NeuralTe (None, 64) 18732060 flatten\_3[0][0]

flatten\_4[0][0]

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dense\_14 (Dense) (None, 50) 27050 flatten\_4[0][0]

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concatenate\_3 (Concatenate) (None, 114) 0 dense\_13[0][0]

neural\_tensor\_layer\_2[0][0]

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concatenate\_4 (Concatenate) (None, 114) 0 dense\_14[0][0]

neural\_tensor\_layer\_2[0][0]

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dense\_15 (Dense) (None, 2) 230 concatenate\_3[0][0]

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dense\_16 (Dense) (None, 2) 230 concatenate\_4[0][0]

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Total params: 20,709,078

Trainable params: 20,709,078

Non-trainable params: 0

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history=model.fit([senti\_train, sub\_train], [sentlabel\_train,sublabel\_train], batch\_size= 64, epochs=20, verbose=1, shuffle=True,validation\_split=0.2)