|  |  |  |  |
| --- | --- | --- | --- |
|  | Linear | My CNN | Tensorflow CNN |
| Epochs | 20 | 20 | 20 |
| Training time | 1s | 27min | 7s |
| Accuracy | 0.8333  0.7583 | 0.7958  0.7833 | 0.8708  0.8083 |
| Parameters | 131,329 | 49,473 | 1,082,177 |
| Loss curve |  |  |  |

Advance part:

**model architecture:**

I choose one conv layer and three dense layer. And I use kernel\_initializer='he\_uniform', reduce\_lr = keras.callbacks.ReduceLROnPlateau to help me get a better accuracy.

**how you choose loss function and optimizer:**

optimizer is adam, since I find that using adam and ReduceLR will have a better performance.

**Loss function:**

I use BCE, since there are only two output,0 and 1.