

Definition 1 n

The quantity of data set.

Definition 2 p

The output probability of corresponding label in ANN output vector.

Definition 3 acc

The accuracy of ANN output, initial value 0.

$$p > 0.5 \rightarrow acc = acc + \frac{1}{n}$$

Definition 4 e

The error of ANN.

Definition 5 $prec$

The precision of ANN output, initial value 0.

$$prec = E(p)$$

Definition 6 rc

The recall rate of ANN deducing.

$$p > (1 - e) \rightarrow rc = rc + \frac{1}{n}$$

Conclusion 1

The flag of training completion could be defined as 3 phases.

Definition 7 Threshold Train Completion I TTC I $acc = 1$

Definition 8 Threshold Train Completion II TTC II $prec > (1 - e)$

Definition 9 Threshold Train Completion III TTC III $rc = 1$