Intelligent Vehicle: Introduction of TensorFlow

Introduction of TensorFlow I:

(1) Installing TensorFlow in TX2.
  a) Using Jetsonhacks's source
(2) The first code in Tensorflow
  a) Hello, Tensor World!
(3) Introduction about Deep Neural Network (DNN)
  a) Softmax
  b) One-hot encoding
  c) Cross entropy
  d) Normalized inputs and initial weights
  e) Dataset size
  f) Optimizing a logistic classifier
  g) Stochastic gradient descent
  h) Momentum and learning rate decay
(4) Practice
  a) Creating your own DNN using Tensorflow: increasing the testing accuracy to 95%

Introduction of TensorFlow II:

(1) DNN continuation
  a) Rectified Linear Units
  b) Regularization
  c) Dropout
(2) Introduction about Convolution Neural Network (CNN)
  a) Feature maps
  b) Convolutions operation
  c) Pooling layer
(3) Practice
  a) Creating your own CNN using Tensorflow

Introduction of TensorFlow III:

(1) Contest
  a) Traffic Sign Classifier: improving the accuracy in testing set