**Deep Learning with TensorFlow**

**Syllabus**

**Module 1 - Introduction to TensorFlow**

* + Introduction to TensorFlow
  + TensorFlow's Hello World
  + Linear Regression with TensorFlow
  + Nonlinear Regression
  + Logistic Regression
  + Activation Functions

**Module 2 - Convolutional Networks**

* + Introduction to Convolutional Networks
  + Convolution and Feature Learning
  + Convolution with Python and Tensor Flow
  + The MNIST Database
  + Multilayer Perceptron with Tensor Flow
  + Convolutional Network with Tensor Flow

**Module 3 - Recurrent Neural Network**

* + The Recurrent Neural Network Model
  + Long Short-Term Memory
  + Recursive Neural Tensor Network Theory
  + Applying Recurrent Networks to Language Modelling

**Module 4 - Unsupervised Learning**

* + The Applications of Unsupervised Learning
  + Restricted Boltzmann Machine
  + Training a Restricted Boltzmann Machine
  + Recommendation System with a Restrictive Boltzmann Machine

**Module 5 - Autoencoders**

* + Introduction to Autoencoders and Applications
  + Autoencoder Structure
  + Autoencoders
  + Deep Belief Network