Udacity Deep Learning Foundations Nanodegree Projects (March 2017 – Aug 2017)

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| **Project Title** | **Github Link** | **Comments** |
| Project 1: Backpropagation Model using Python | <https://github.com/infomindgithub/Project1-Udacity-Deep-Learning-Foundations-NanoDegree> | Implement Backpropagation with Python, in a three layer Neural Network. |
| Project 2: Image Classification --Convolutional-Neural-Network | <https://github.com/infomindgithub/Image-Classification--Convolutional-Neural-Network--Udacity-Deep-Learning-Foundations-NanoDegree> | Classify images from the CIFAR-10 dataset using a Convolutional Neural Network model built using Tensor Flow. |
| Project 3:  TV script generation | <https://github.com/infomindgithub/Udacity-Deep-Learning-Nanodegree-Project3-dlnd-tv-script-generation> | A Recurrent Neural Network Model (RNN) in Tensor Flow for Udacity-Deep-Learning-Nanodegree-Project3-dlnd-tv-script-generation  TV scripts are generated using RNNs using the familiar TV show Simpsons. Used part of the Simpsons dataset of scripts from 27 seasons. The Neural Network generated a new TV script for a scene at Moe's Tavern. |
| Project 4: Language translation | <https://github.com/infomindgithub/Udacity-Deep-Learning-Nanodegree-Project4-dlnd_language_translation> | A Recurrent Neural Network Model (RNN) in Tensor Flow for machine translation. Building and training a sequence to sequence model on a dataset of English and French sentences that can translate new sentences from English to French. |
| Project 5:  Face image generation using GAN | <https://github.com/infomindgithub/Udacity-Deep-Learning-Nanodegree-Project5-dlnd-face-recognition> | Used generative adversarial networks (GAN) to generate new images of faces. Built a GAN using convolutional layers in the generator and discriminator (Deep Convolutional GAN, or DCGAN). Used batch normalization to get the convolutional networks to train. |