DEEP LEARNING WITH KERAS

06/03/19 - 07/03/19

Objectives of the 2-day workshop:

- 1. Make Deep Learning easy for everyone
- 2. Learn to apply Artificial Intelligence (AI) to create social impact.

What you will gain:

- Easily grasp State of art Deep Learning Techniques along with hands-on programming
- 2. Work as a team to win to apply AI for social impact and start developing prototypes.
- 3. If you are interested in applying technology for a good cause, Day 2 of the workshop will bring out this potential in you.

Day 1:

Session 1: Introduction to the Art of Deep Learning.

- 1. Introduction to Deep Learning concepts
- 2. How to easily get started on Deep Learning projects using Keras on Google Tensorflow
- 3. How to apply Deep Learning for Computer Vision

Session 2: Create Cutting edge Artificial Intelligence solutions

- 1. Art of architecting a neural network
- 2. Grasp how to develop cutting edge AI by learning from state of art AI research papers in the last 3 years (Image classification, Auto-encoder, GAN)
- 3. Hands-on practice to Keras Functional API on python

Day 2:

Session 1: How to apply AI to solve a problem?

1. How to solve problems such as self-driving cars or healthcare innovation or agricultural productivity.

Session 2: Hack-a-thon: Applying Deep Learning for social impact

- 1. Hack-a-thon and win prizes as a team
- 2. Present your ideas and results in 60 seconds

Pre-requisites or Pre-reading:

- 1. Some basic exposure to programming.
- 2. If you are a student from CS branch, and if your expose to any language such as C or C++ or Java, you might want to learn some Python before you walk in.
- 3. If you are a Karunya student from non-CS branch, just read/watch any introductory Python programming tutorial for 2 hours before you walk in.

Requirements:

- 1. Laptop.
- 2. Google Chrome web browser and create an email id with Google.