9 Week AI Workshop Description

9-week Online Deep-dive AI workshop UTD CS is thrilled to offer Artificial Intelligence Online Workshop for 9 weeks (June 8 to August 6, 2021) for College Students & Advanced Level High School Students. This camp actually runs Monday to Friday for all 9 weeks (10 am-5 pm) with a lunch break for an hour.

Lead Instructor: Professor Kamran Khan, CS faculty, UT Dallas. We will send a camp certificate and t-shirt to each camper.

Pre-requisites: Familiarity with Python programming, and high school level math. Willing to invest time & energy to learn advanced coding, data analysis skills and apply them to a real-life project.

LIST OF TOPICS:

1. Introduction to Python programming, tools for data analysis such as NumPy, pandas, graphics

2. Getting started with data processing – various file formats, loading into data frames, and performing basic statistical operations.

3. Introduction to machine learning, with examples and real-life scenarios.

4. AI/ML model building – decision trees, neural networks, etc.

5. Deep Neural Nets using TensorFlow

6. Convolution Neural Nets(CNN) and Recursive Neural Nets (RNN)

7. Model Evaluation – accuracy, error, ROC curve

8. Project Activities