## **Essential guidance for**

## the online class ECE884-730: Neural Networks and Deep Learning

## This guidance may be updated as class progresses.

- 1. This course is intended to be asynchronous, fully online, using pre-recorded video lectures and support material. The instructor will guide the progress of the course through MSU Zoom meetings scheduled on Tuesdays and/or Thursdays primarily for Q&A. Times are scheduled to be from 5pm-6:30pm.
- 2. The goal of this class is to enable the student to be "current" in Deep Learning (DL) hands-on capabilities and applications supported by basic technical understanding (of Deep Learning).
- 3. At a minimum, a student can rely on the lecture videos and the class notes and textbook(s) to do well in this project-driven class. In addition, one needs to acquire knowledge in DL Frameworks. Google's Tensorflow 2.0 (or tf) is highly favored as an option using the (sub)module Keras (tf.keras). You should read up/consult keras.io (Google it).
- 4. For executing assignments, we will have access to the Google Cloud Engine (GCE) via educational grants-- if necessary. The GCE is a broad Cloud Computing platform. For DL, however, we can also (& easily) use the Google **colab**. You can start by the 2<sup>nd</sup> week using the tutorial on GCE in the D2L folder and also online.
- 5. We shall use MSU **gitlab** for "pulling" and "pushing" assignments. Gitlab is similar to github. Both are a must for any serious coding (beyond version control). In the 1<sup>st</sup> week, you may follow the tutorial to learn about MSU gitlab. We shall also use the free app **Piazza** for the class/group communication and off-line Q&A. you can access the class Piazza link at piazza.com/msu.