## CAP 5636 - Homework 2

## Due Thursday, September 4, 2025

From the website "Introduction to deep learning" http://introtodeeplearning.com watch the following lectures:

- Lecture 1: Intro to Deep Learning (Mar 3, 2025)
- Lecture 2: Deep Sequence Modeling (Mar 10, 2025)
- Lecture 3: Deep Computer Vision (Mar 17, 2025)
- Lecture 4: Deep Generative Modeling (Mar 24, 2025)

While watching the videos keep a notebook ready (on paper or on the computer). Take notes (N:) or questions (Q:) of one or two lines, prefixed by the time in the video. In particular, take a note when: (a) something in the video provided you with new knowledge or insight or (b) something in the video is either not understandable or led to a new question.

## For instance:

15:30 Q: Why would a backward connection in a neural network be the same thing as memory? 
18:00 N: So the reason why the object can be detected everywhere in the screen is because the convolutions are the same everywhere.

I expect that you have at least 10 such notes or questions per lecture.

## What to submit

A word or pdf document, with four sections, one for each of the lectures, each listing the notes/questions.