**Graded Discussion 1**

What deep learning or reinforcement learning topic are you most interested in?

What problem in your work or a potential personal project do you think Deep Learning might be a good solution?

Make a post of about 100-300 words discussing your answers. Then post a comment or question on another students post of about 100-200 words.  Posts are due by April 18. Respond to this thread, do not post responds in Canvas.

One of the topics on deep learning I would like to explore are GANs (Generative Adversarial Networks). The main reason for this is that at work (Boeing) some teams are trying to implement this to obtain a more accurate 3D models of the airplanes that we are building by taking some of the pictures (2D images) that we have and generate a 3D more realistic depiction of the airplane. Another related project that is currently under develop is the generation a realistic 3D model of the different landing runways, this with the purpose of improve landing simulations for pilots training.

Another problem at work where I think Deep Learning could help with is the identification of damage on different parts of the airplane. By now we have a substantial library of pictures and descriptions of different kind of damage on different parts of the airplane. This is a very time consuming task and based on the current database of pictures of good parts (per drawing parts) and damaged parts (with labels) we could potentially streamline the process by using deep learning to first determine if there is damage on a part by looking at it and then to identify the kind of damage that is seen on that particular part.