Generative Adversarial Networks

1. The development of Generative Adversarial Networks was motivated, in part, by
   1. the vulnerability of standard Deep Learning approaches to input manipulation
2. (True/False) GANs are a way of training two neural networks simultaneously.
   1. True
3. (True/False) GANs are probably behind some applications like FaceApp and applications that can make you look older.
   1. True

# Reinforcement Learning

1. Relative to problems suitable for Deep Learning, Reinforcement Learning allows for analysis of problems in which:
   1. agents control actions taken and learn to optimize outcomes over time.
2. Which of the following examples would NOT be suitable for Reinforcement Learning?
   1. Estimating the directional impact of wind on drone movement
3. Which of the following statements about the environment in a Reinforcement Learning problem is TRUE?
   1. The timing of expected rewards can impact the policy rule selected by the agent.

# Module 6 Quiz

1. (True/False) Simulation is a common approach for Reinforcement Learning applications that are complex or computing intensive.
   1. True
2. (True/False) Discounting rewards refers to an agent reducing the value of the reward based on its uncertainty.
   1. False
3. (True/False) Successful Reinforcement Learning approaches are often limited by extreme sensitivity to hyperparameters.
   1. True
4. (True/False) Reinforcement Learning approaches are often limited by excessive computation resources and data requirements.
   1. True
5. Which type of Deep Learning approach is most commonly used for image recognition?
   1. Convolutional Neural Network
6. Which type of Deep Learning approach is most commonly used for forecasting problems?
   1. Recurrent Neural Network
7. Which type of Deep Learning approach is most commonly used for generating artificial images?
   1. Autoencoders
8. The main parts of GANs architecture are:
   1. generator and discriminator
9. (True/False) One of the main advantages of GANs over other adversarial networks is that it does not spend any time evaluating whether an input or image is fake or real. It only computes probability of being fake.
   1. True