PIAIC - AI FOR EVERYONE (ANSWERS)

QUIZ 1:

- 1) ANI
- 2) Supervised learning
- 3) A large dataset (of audio files and the corresponding text transcript) / A large neural network
- 4) false
- 5) Some types of data are more valuable than others; working with an AI team can help you figure out what data to acquire.
- 6) Pictures of your scooters / Audio files of the engine sound of your scooters
- 7) A slide deck presenting a plan on how to modify pricing in order to improve sales. / Insights into how to market cat food more effectively, depending on the breed of cat.
- 8) Deep learning is a type of machine learning. (I.e., all deep learning algorithms are machine learning algorithms.) / The terms "Deep learning" and "neural network" are used almost interchangeably.
- 9) All of the above
- 10) True

QUIZ 2:

- 1) True
- 2) (ii) (iii) (i)
- 3) All of the above
- 4) All options
- 5) false
- 6) Defining an engineering timeline / Making sure you can get enough data for this project / Making sure that an AI system can meet the desired performance
- 7) Business diligence is the process of ensuring that the AI technology, if it is built, is valuable for your business.

- 8) It should give examples of both the input A (resume) and the desired output B (whether to move forward with a candidate). / It will be used by the AI team to train the supervised learning algorithm.
- 9) It will be used by the AI team to evaluate the performance of the algorithm. / It should give examples of both the input A (resume) and the desired output B (whether to move forward with a candidate)
- 10) All of the above.

QUIZ 3:

- 1) False
- 2) Trigger word detection -> speech recognition -> intent recognition -> command execution.
- 3) Supervised learning
- 4) Machine learning engineer
- 5) Execute pilot projects to gain momentum
- 6) Succeed and show traction within 6-10 months
- 7) better smart speaker -> more user -> more data
- 8) Without having some practical AI experience and knowing what it feels like to build an AI project, a company usually does not know enough to formulate a sound strategy.
- 9) true
- 10) Expecting AI to solve everything / Expecting traditional planning processes to apply without changes / Expecting AI based projects to work the first time

QUIZ 4:

- 1) Al technology can be biased / Explainability is hard / Al technology is susceptible to adversarial attacks / Al technology can discriminate .
- 2) One shouldn't be too optimistic or too pessimistic about AI technology
- 3) Lack of explainability can hamper users' willingness to trust and adopt an AI system.

- 4) true
- 5) true
- 6) Systematic auditing processes to check for bias/ Technical solution such as "zeroing out" bias / Using more inclusive/less biased data
- 7) Subtly changing an image to make an AI system mistakenly recognize a dog as a cat. / Adding a sticker to a stop sign to make an AI system fail to detect it.
- 8) true
- 9) Jobs that comprise primarily of routine, repetitive work
- 10) true