MM Text: Chapter 6 Semantic Network



- 1. (1) What fools ConvNets? (2) Does a ConvNet always observe the same patterns to distinguish things as a human?
- 2. (1) What is unsupervised learning considered? (2) Who said this?
- 3. (1) Who had the gorilla tag PR nightmare? (2) What was the temporary solution to this problem?
- 4. (1) What do tech companies have to deal with? (2) From what field does the answer to (1) get its name from?
- 5. (1) What do humans have? (2) How does this help humans in object recognition?
- 6. (1) What fooled AlexNet? (2) What kind of algorithm was used to generate TV-static looking images to fool AlexNet?
- 7. (1) What do tech companies use and sell? (2) What is an ethical concern of selling your data to advertising companies?
- 8. (1) What do humans set up? (2) In what fields has there been a rise in explainable AI?
- 9. (1) What does the Long Tail problem regard? (2) What is a Long Tail problem scenario Tesla may have to account for when creating its self driving cars?
- 10. (1) What might machine learning just be? (2) Who was Clever Hans?

Answers

- 1. (1) Adversarial examples fool ConvNets. (2) Almost never.
- 2. (1) Unsupervised learning is considered AI dark matter. (2) Yann LeCunn claimed this.
- 3. (1) Google had the gorilla tag PR nightmare. (2) Their solution was to remove gorilla as a tag from their set of possible tags.
- 4. (1) Tech companies have to deal with the Long Tail Problem. (2) This problem gets its name from statistics
- 5. (1) Humans have common sense. (2) Humans already know a background about many objects, making it easier to identify them.
- 6. (1) Pixel Manipulation fooled AlexNet. (2) A genetic algorithm was used.
- 7. (1) Tech companies are using and selling your data. (2) You are rarely asked if a company has the right to sell your private data. It is also hard to determine which data of yours they have.
- 8. (1) Humans set up hyperparameters. (2) The medical fields, and legal fields.
- 9. (1) The long tail problem regards unexpected scenarios. (2) An unlikely situation Tesla may have to account for is a boulder in the road.
- 10. (1) Machine learning may just be a Clever Hans. (2) Clever Hans was a horse in Germany which could allegedly perform math and understand German. This was found to be false after some very carefully controlled experiments.