

A.) Machine learning is a process of guided pattern recognition in order for machines to simulate cognition

B.) Data is gathered by the machines to make decisions according to the information they have gathered before. The more diverse a data pool is, the more accurate a machine can become. Machines can pick up on patterns from the data to automate the decision-making process.

C.) Artificial Intelligence seems to be a concept to apply human-like cognition to a machine, hence the word intelligence. Machine Learning is the process in which machines develop this intelligence, working around its limitations to train

D.) ChatGPT is the first example that comes to mind. The answers it can give are only possible through extensive training in natural language processing and world events among other things(which stopped at around 2021). Another tool that couldn't exist solely with traditional programming is the image synthesis tool Dall-E, as it continuously trains with images found on the internet.

E.) Observation in terms of machine learning is an instance that can be used to model relationships or make conclusions about something. A feature is a distinctive characteristic. Quantitative data is information measured strictly by numeric data. Qualitative data is data expressed in terms outside of numeric data (images, text, etc.). All of these definitions relate to machine learning in that a machine extracts different kinds of information from data to make informed decisions/categorizations.

F.) My interests in machine learning lie in task optimization for professional work. More specifically, it would be in an employee's best interest to use automation as a workplace tool as opposed to replacement. I have previously used python for regression modeling and an image synthesis project. I'd like to work with audio data to explore voice/music synthesis capabilities.