Machine Learning is the act of inputting data into an algorithm. Inputting data is done so that the algorithm tries to correlate or guess future values or helps analyze the data to find correlations.

Pattern recognition is important in machine learning so that you can try to internalize the data for later future implications. This is to say that you can try to draw correlations from other data to help predict or learn what will be a likely/reasonable outcome. You need data to start implying things in the first place. It is beneficial to have a lot of data to draw stronger ties or predictions. This does not mean every piece of data will have correlations, but that in having a lot of data, you can be sure if there is a correlation or likely outcome present, as the data will help you obtain patterns. Accuracy is important in machine learning because it can help you make those connections between datasets and help develop patterns for easy recognition.

Machine Learning is a part of Artificial Intelligence. Artificial intelligence is the act of trying to imitate human intelligence (typically people associate this to the copying of emotion.) Machine learning is the act of having the machine teach itself for recognition and patterns from an input of data or queries.

Two examples of modern machine learning applications are the sorting and tagging of photos and the use of self-driving cars. These applications cannot be made with regular programming since there is an ever changing amount of pictures, as well as, a change or road, cars, and obstacles to overcome to where it would be impossible to code something for every situation. Instead, you would have to get the machine to make the best decision based on the data that it has collected beforehand. In this, the data is ever growing/improving, and is able to still accomplish the goal it was meant to do.

Observation is any data derived from an object. Observations are important because you can show correlations between different data sets and you can start to get a feel for how the data will try to formulate. Feature is a measurable characteristic from data. This is important because it helps us show if the data is good for prediction. Quantitative data is anything that can be measured or numeric. This data is important because it is a form of storing data to help show relation. Qualitative data is categorical. This data is important because it allows you to group data into categories.

I am interested in Machine Learning so that I can create applications of it in a professional setting. I have tried some different applications of Machine Learning, but have never taken the course. I have tried everything from trying to create my own bot to predict stock information to having my bot recognize characters and objects from a video game I play (runescape.) As of most recently, I have worked with a company called SWYE360 to predict student improvement methods based on studying done on any platform. It’s these features and creating things I know would be impossible for me to do or calculate that excite me. As such, I am sure that Machine Learning will lead the future in terms of creating complex and practical solutions for things we do in our day to day life.