UNDERSTANDING

Alvs ML vs DL



Cody

@codechips

Art Credit : Toy Story

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Source : Gavita Regunath popupdev04@gmail.com



Andy owns a Toy Store

He receives a bunch of toys all mixed up every week





The employees segregate the toys

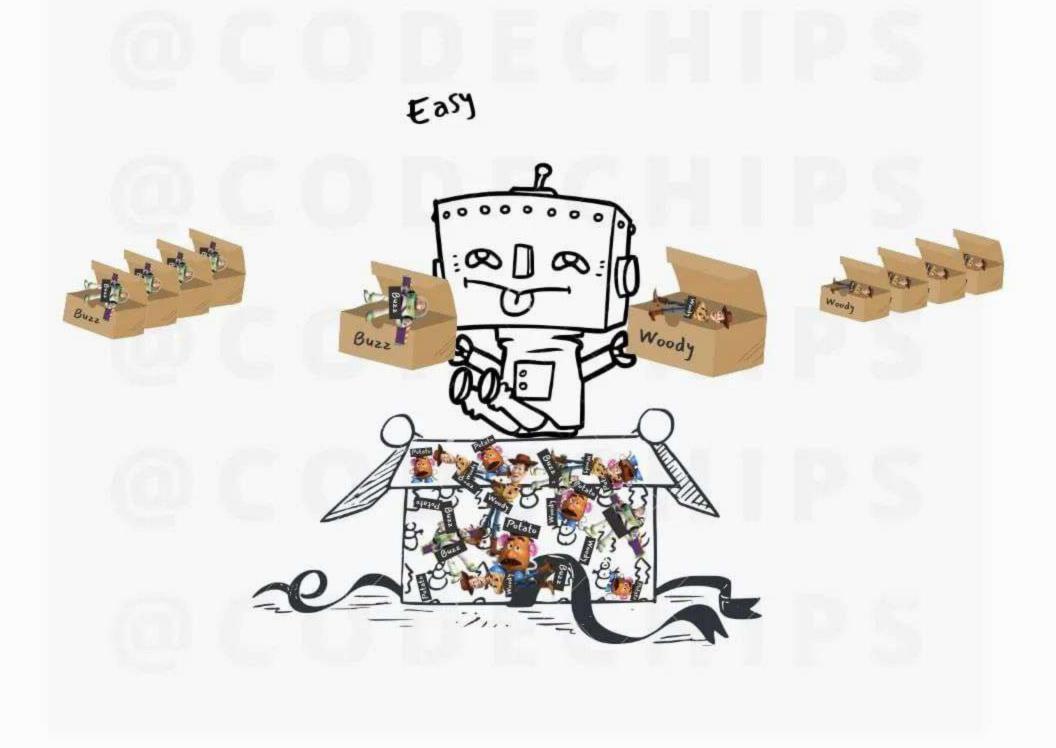
manually





But Andy want to scale fast

So he decided to use an Al powered Automation Robot to handle the task





Al is the effort to automate intellectual tasks normally performed by humans

This is done based on a rule-based engine that has been hard coded by humans

Scans the tag and classifies it





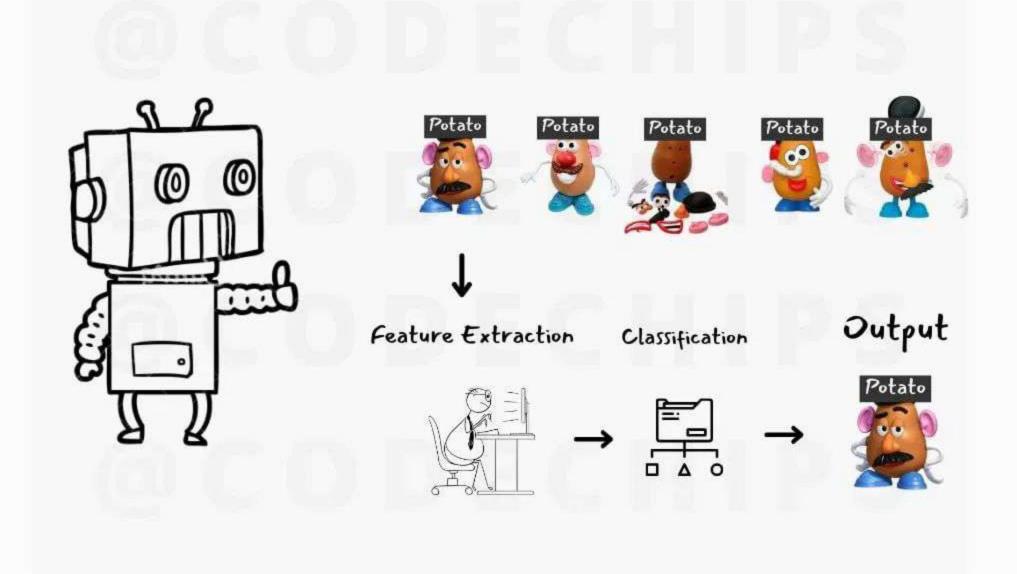


But what if the Toys come untagged?



An Machine Learning-based algorithm is now proposed to solve the problem

To create a ML model **features** need to be extracted & defined for the model to **train** until it could recognize what each toy would look like





Andy's Toy Store ran successfully and more toys came in

But these were in large quantity and toys he had never seen before, how could he now extract this large data?

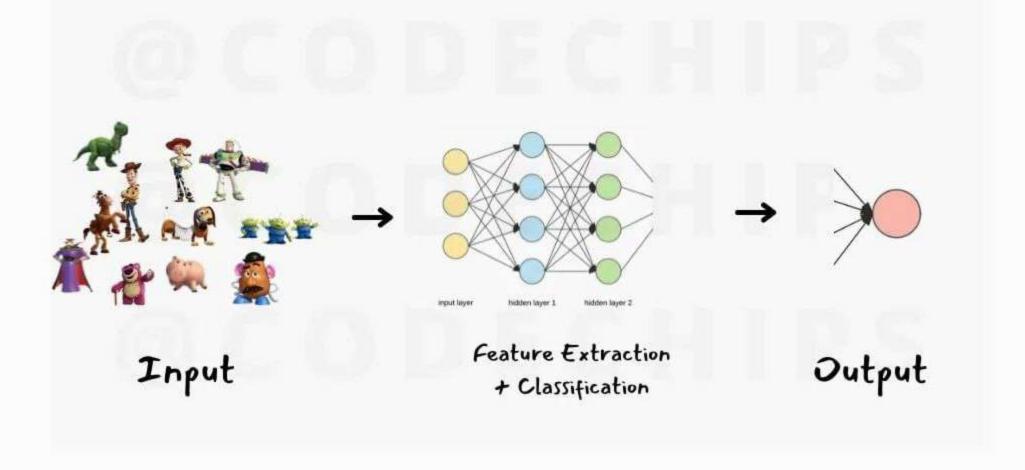




That is where **Deep Learning** comes into play

A DL-based algorithm is used to sort any toy by totally removing the need for defining features of each toy

It does not need to be provided with features to classify correctly, it processes the provided images through neural networks (mimicing the human brain) to define specific features and classify them





Each technology is essentially a subset of the preceding technology

AI is the development of computer systems to be able to perform tasks normally requiring human intelligence

Artificial Intelligence

Machine Learning

Deep Learning

ML is a subset of AI able to automatically learn and improve from experience without being explicitly programmed

DL is a subset of ML, uses the neural networks to analyze different factors similar to the human neural system