

# The Wonderful and Terrifying Implications of Computer

-A TEDx TALK BY JEREMY HOWARD



Arthur Samuel, an American pioneer in the field of computer gaming and artificial intelligence, coined the term “Machine Learning” in 1959 while at IBM.

# Machine Learning

- Machine Learning is a field of computer science that gives computers the ability to learn without being explicitly programmed.
- It is closely related to computational statistics which also focuses on prediction-making through the use of computers.
- It has strong ties to mathematical optimization which delivers methods, theory and application domains to the field.

# Computers Can Learn

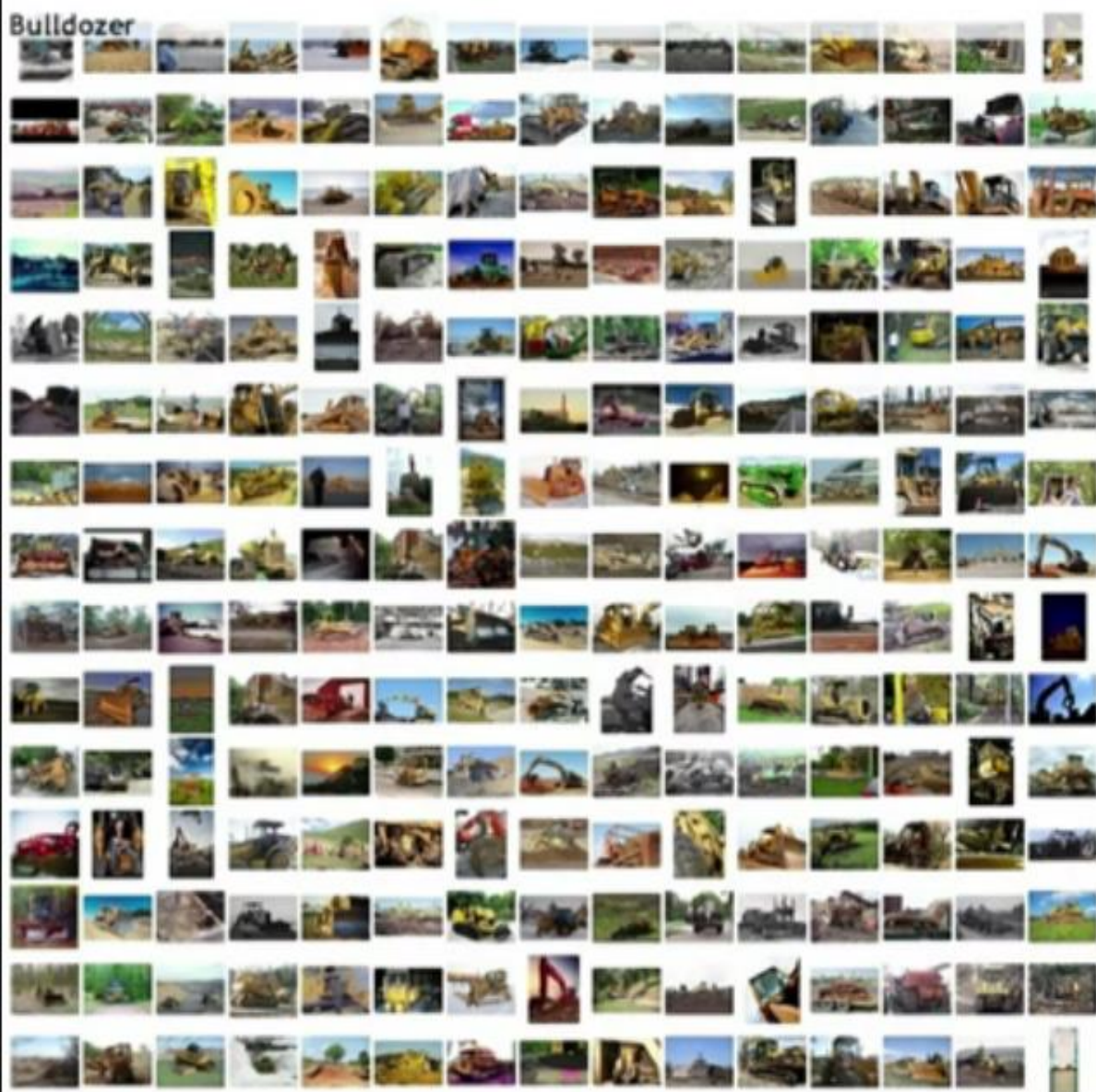


# Deep Learning

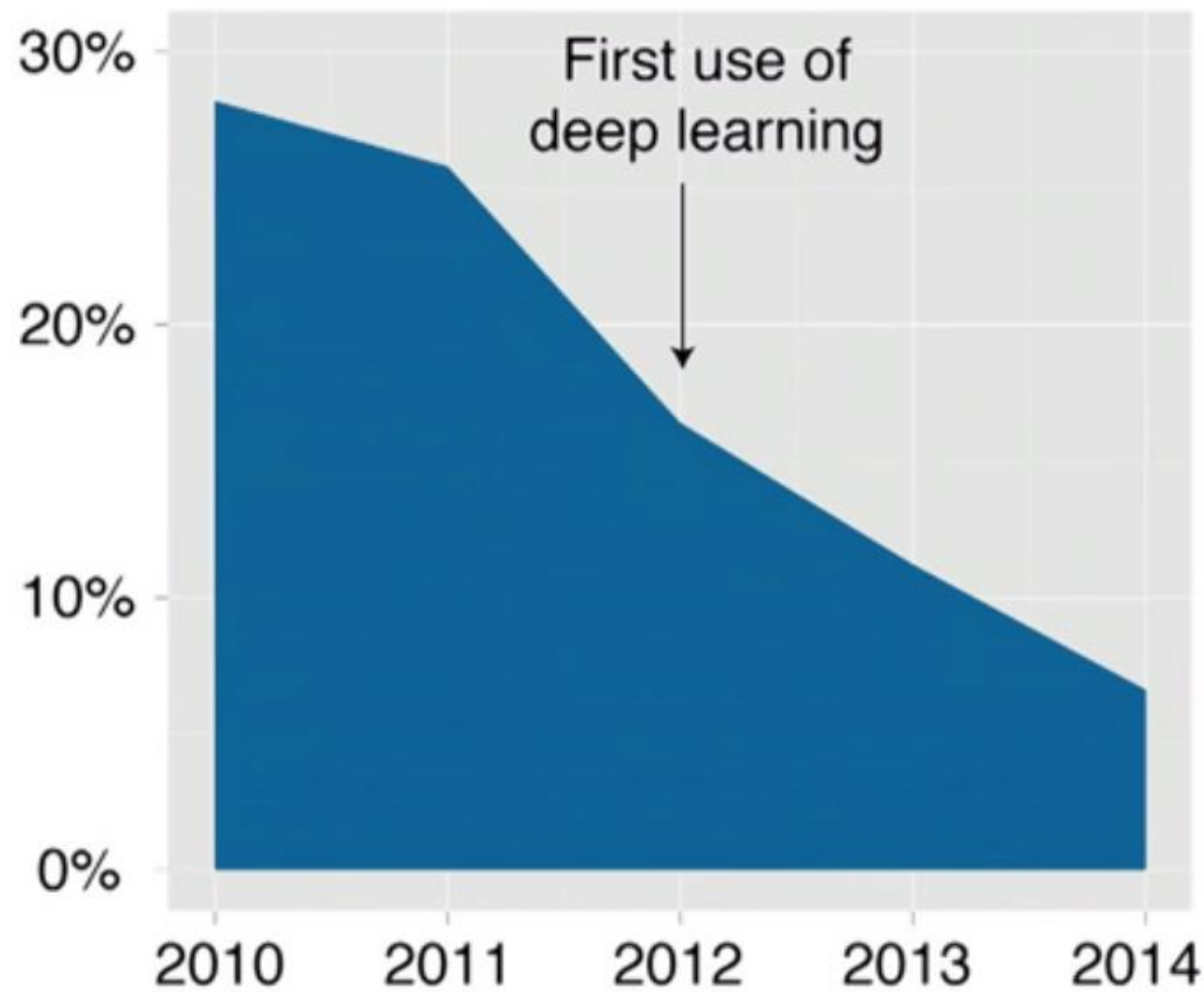
- Deep Learning also known as hierarchical learning is part of broader family of machine learning methods based on learning data representations as opposed to task specific algorithms.
- Learning can be supervised, partially supervised or unsupervised



ImageNet examples



Object classification error rate



# Computers Can See





# Computers Can Write



"man in black shirt is playing guitar."



"construction worker in orange safety vest is working on road."



"two young girls are playing with lego toy."



"girl in pink dress is jumping in air."

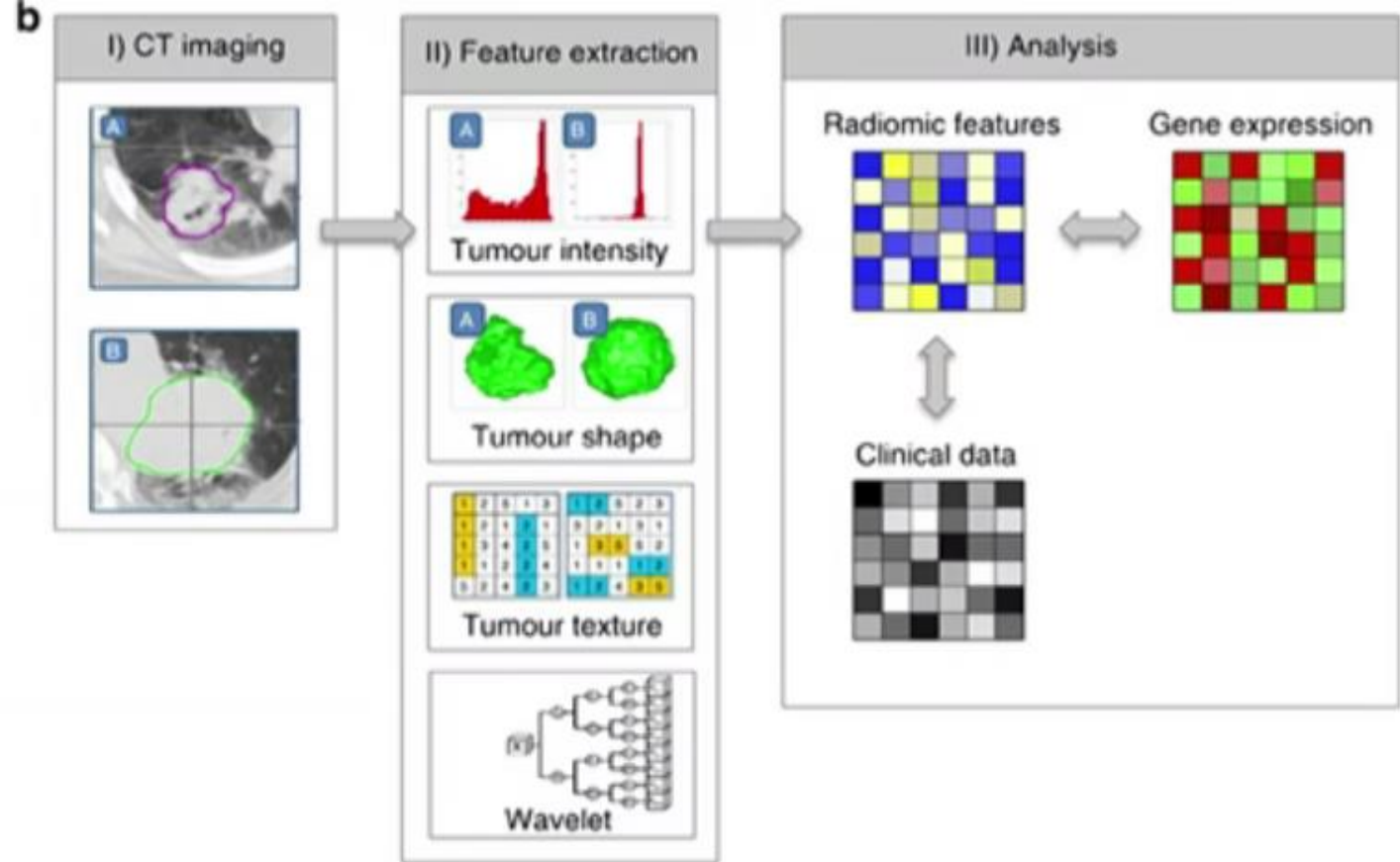
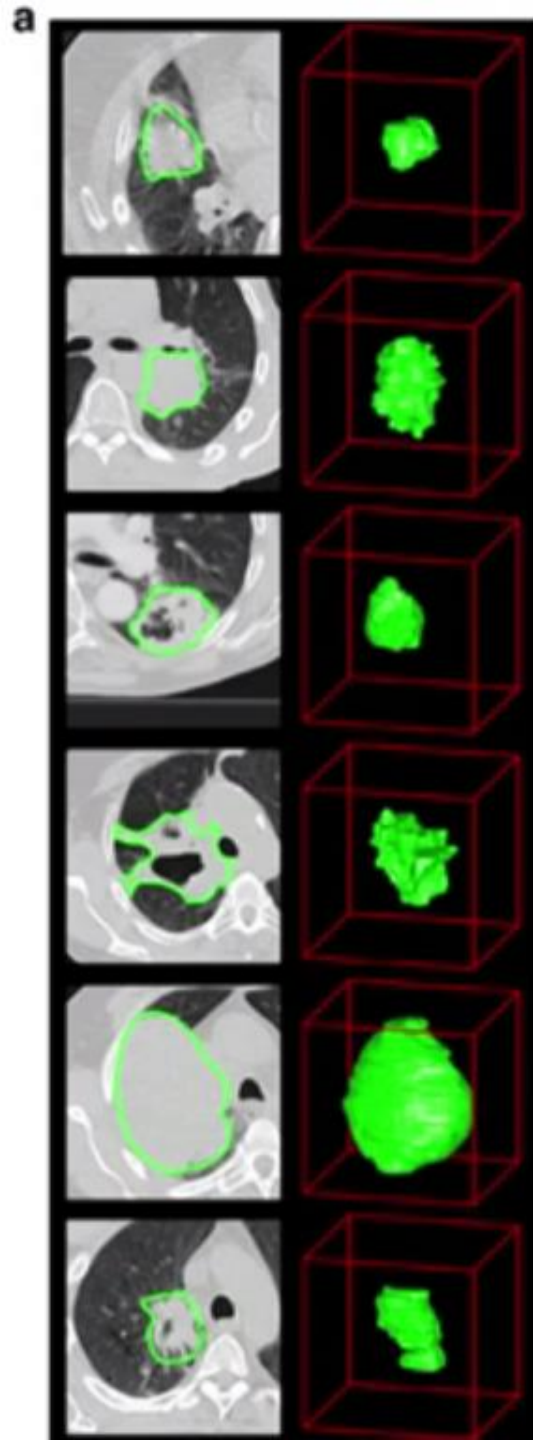


"black and white dog jumps over bar."



"young girl in pink shirt is swinging on swing."





THANK YOU