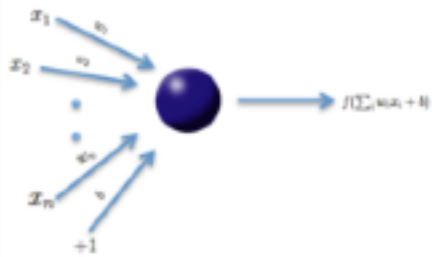

H2O.ai

What is Deep Learning?

What it is:

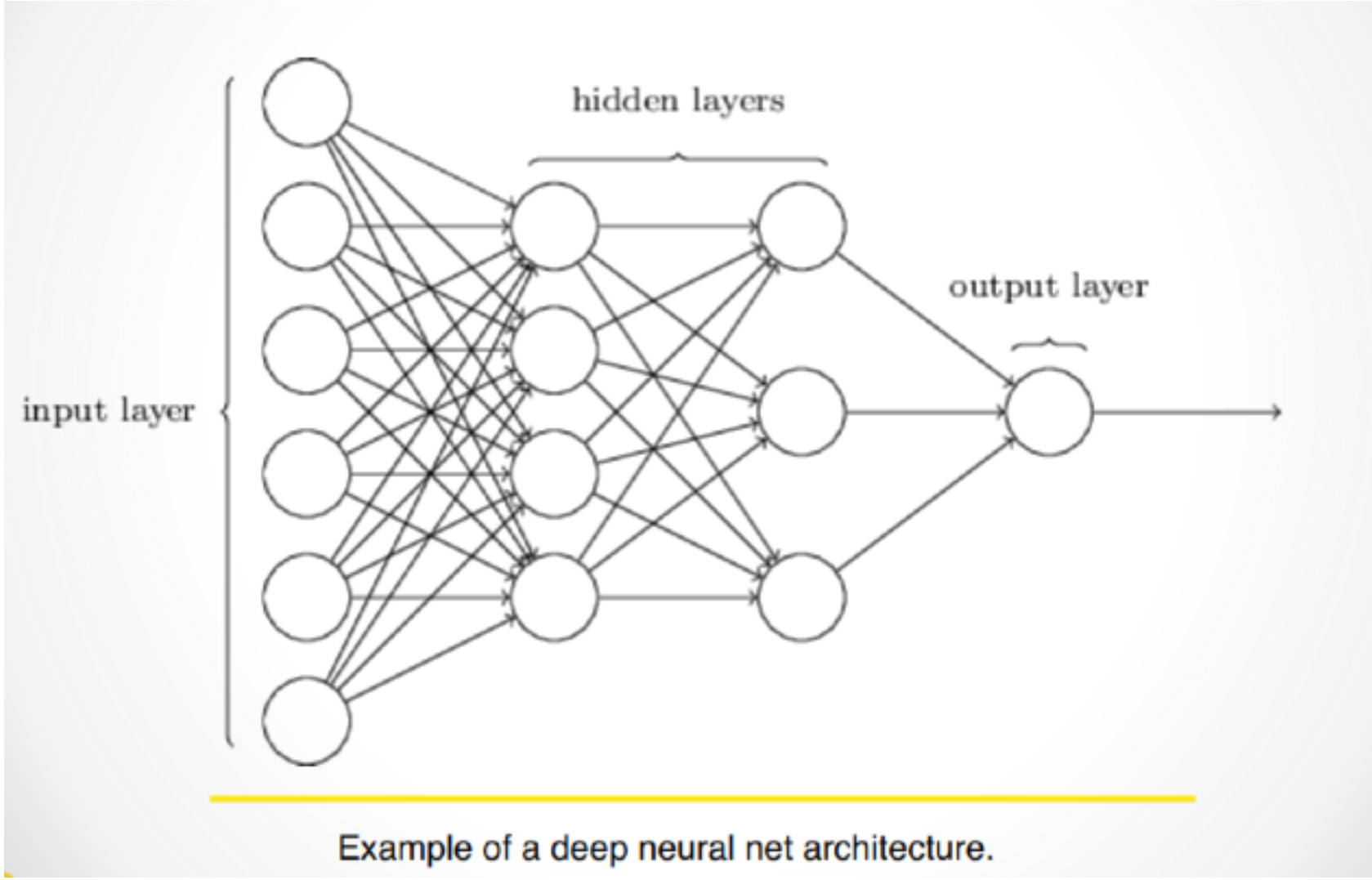


- "A branch of machine learning based on a set of algorithms that attempt to model high-level abstractions in data by using model architectures, composed of multiple non-linear transformations." (Wikipedia, 2015)
- Deep neural networks have more than one hidden layer in their architecture. That's what's "deep."
- Very useful for complex input data such as images, video, audio.

What it's not:

Deep learning architectures, specifically artificial neural networks (ANNs) have been around since 1980, so they are not new. However, there were breakthroughs in training techniques that lead to their recent resurgence (mid 2000's). Combined with modern computing power, they are quite effective.

An example “Deep” Neural Network



Example of a deep neural net architecture.

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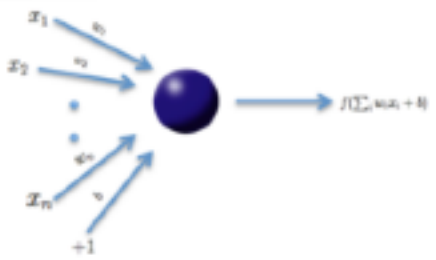

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