DATA SCIENCE INFINITY

ARTIFICIAL INTELLIGENCE

MACHINE LEARNING

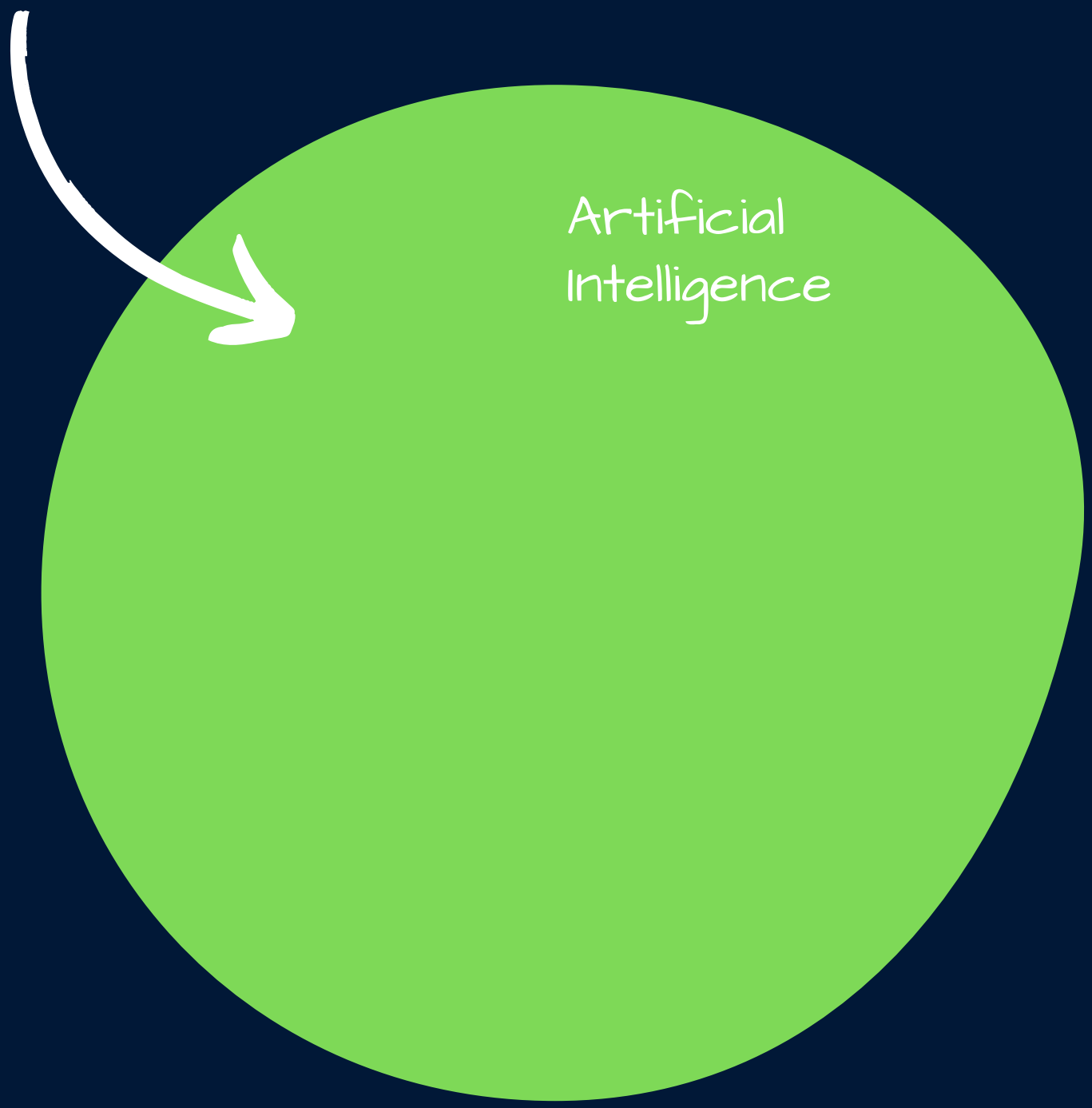
VS

DEEP LEARNING

DATA SCIENCE

ARTIFICIAL INTELLIGENCE

Artificial Intelligence (A.I.) is the **broader field**, in which the aim is to programme machines to somewhat mimic the cognitive processes associated with humans, things such as learning, and problem solving!



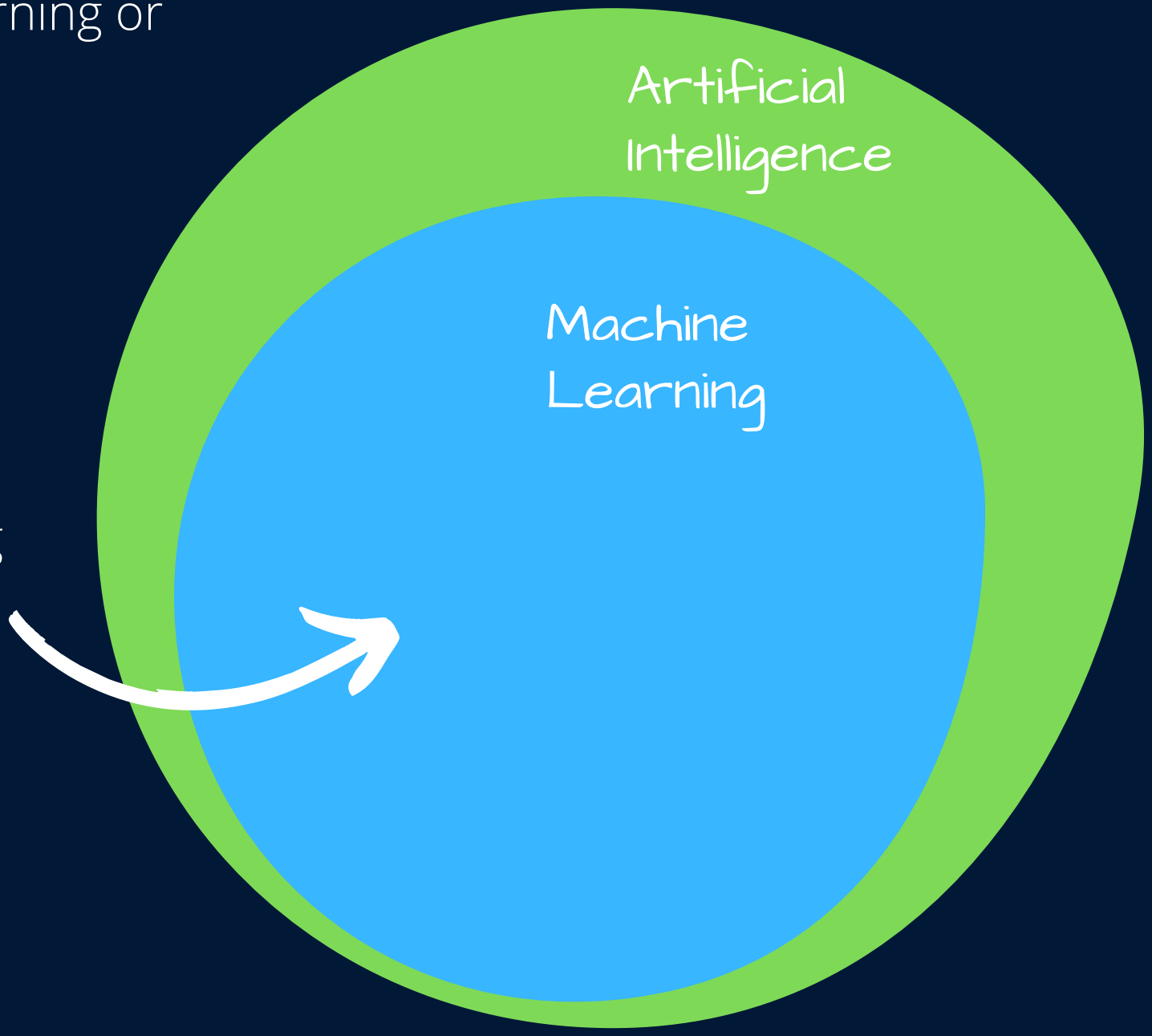
MACHINE LEARNING

Machine Learning (ML) sits within the field of Artificial Intelligence - and more precisely, Machine Learning is the **implementation**.

It's the techniques, the algorithms, and the methods that get us to this place of machine based learning or problem solving.

Machine Learning itself is commonly broken up into 3 "types" of learning:

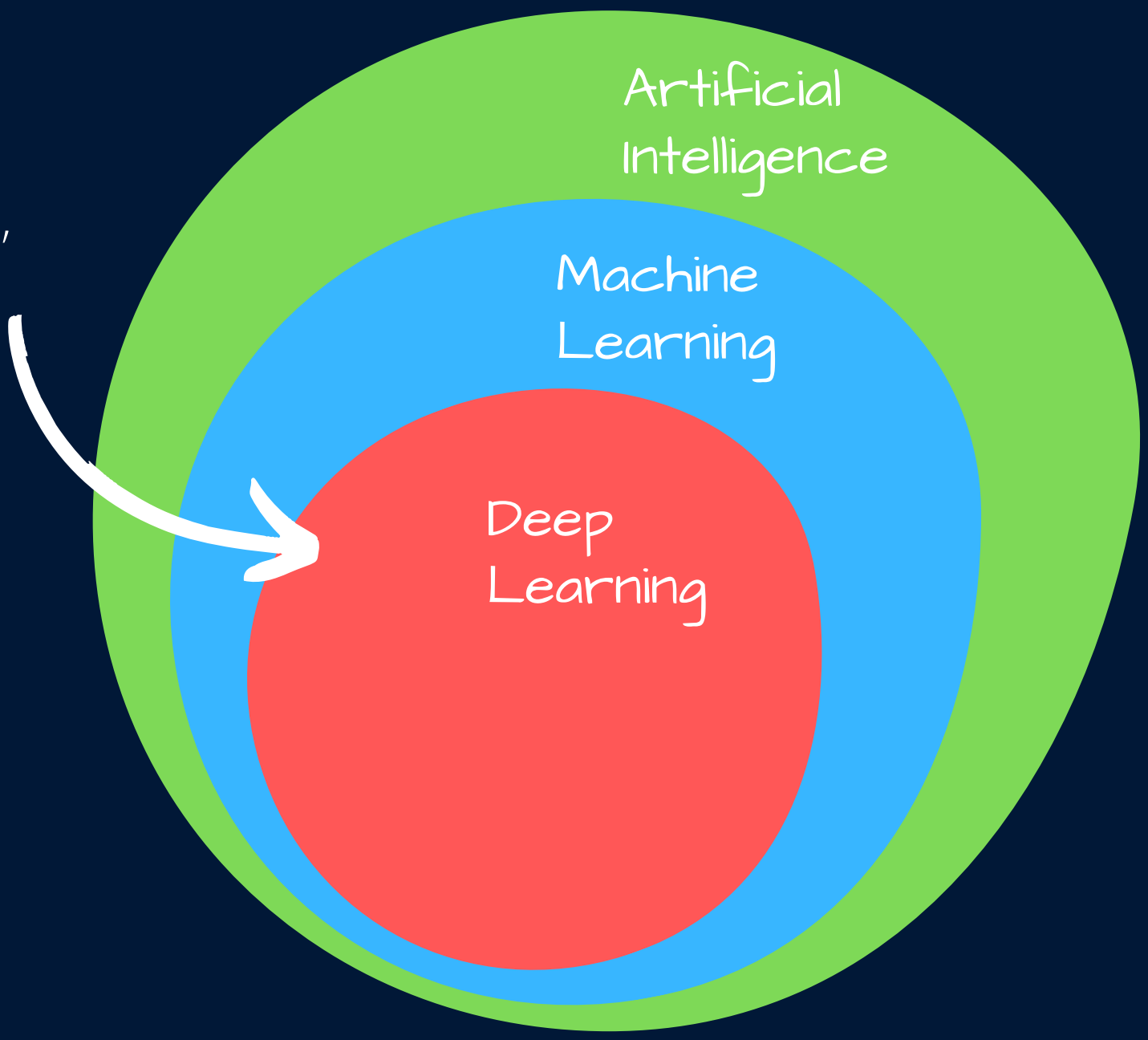
- Supervised Learning
- Unsupervised Learning
- Reinforcement Learning



DEEP LEARNING

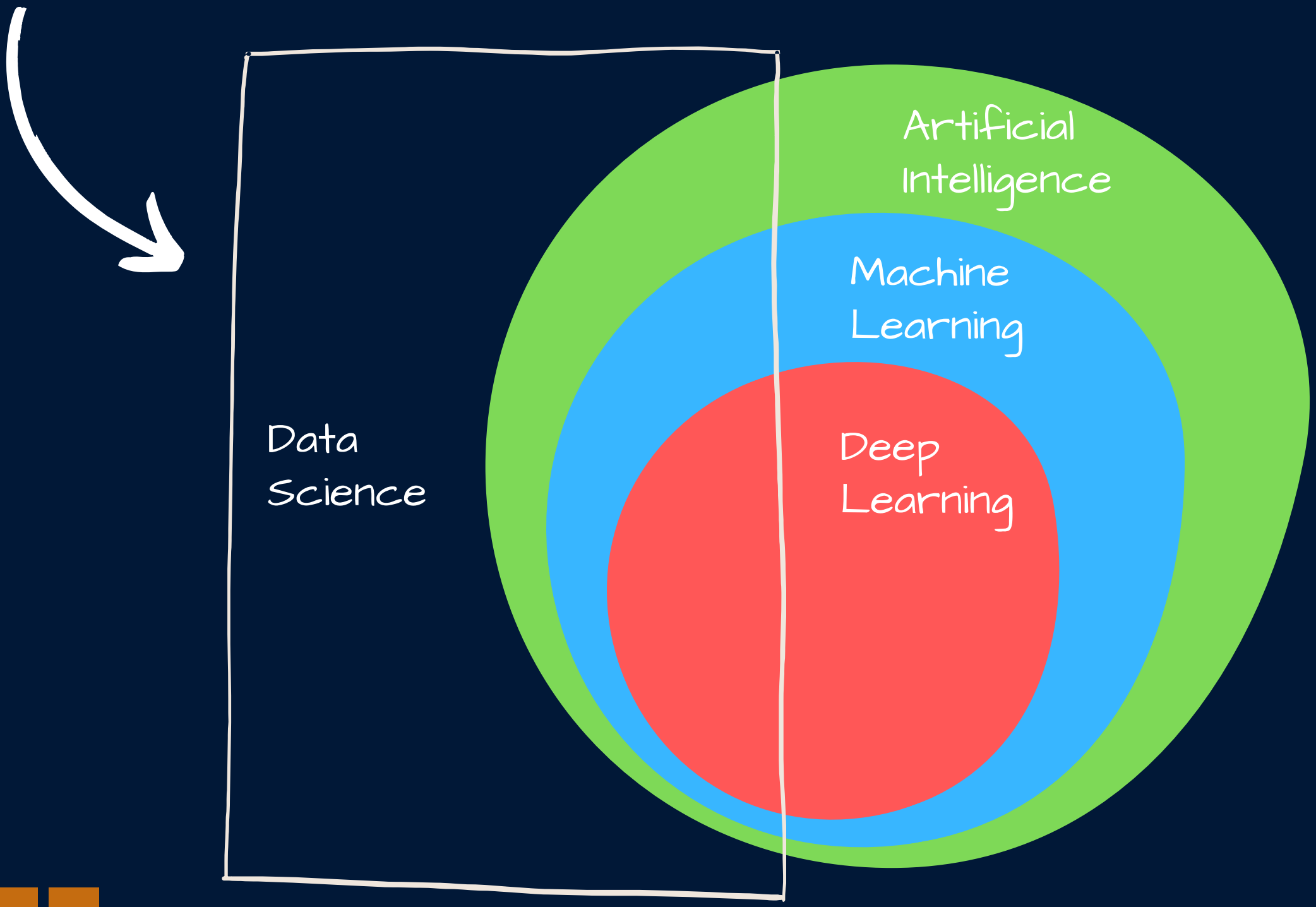
Deep Learning is a subset of algorithms & techniques within the area of Machine Learning - specifically those utilising multi-layered Neural Networks - algorithms based loosely on the workings of our own brains.

These techniques are often more adept at solving problems in more abstract data, such as images, sound, and language.



DATA SCIENCE

Data Science is a field that combines these areas, plus mathematics & statistics, programming, and domain knowledge...all in its noble quest to solve problems, and add value to business and to society!



TO SUMMARISE...

So let's recap...

Artificial Intelligence (A.I.) is the broader field, with the aim of programming machines to learn and problem solve.

Machine Learning (ML) is more the actual implementation to get there, so the algorithms and techniques themselves - and **Deep Learning** is a specific subset of algorithms within Machine Learning.

Data Science doesn't fit into these areas, it instead fits across them, and makes use of them (as well as other skills & tools) to add value using data!