University of South Australia

Big Data & Artificial Intelligence

Recall – Big Data

- Data sets whose **volume**, **velocity** or **variety** is so large and complex that it is difficult to store, manage, process and analyse using traditional database systems and data processing tools.

Artificial Intelligence (AI)

Photo by Arseny Togulev on Unsplash

- Systems that can think and learn as intelligent humans would.

- E.g. in business:
  - Analyse vast amounts of consumer data and apply results to enhance customer experience.
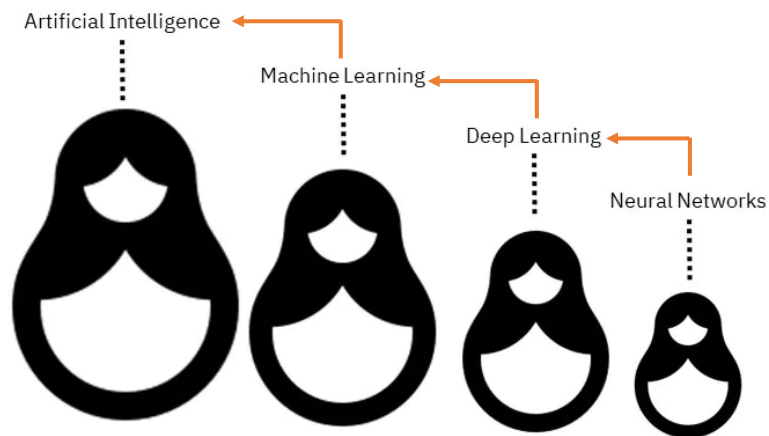
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Machine learning

Photo by Kevin Ku on Unsplash

- Algorithms that allow machines to learn from data inputs.
- One of characteristics a system must possess to be considered intelligent.

4

Four nested technologies

5

What's the link ?

- AI provides the large-scale analytics needed to extract meaning and value from Big Data.

- Big Data provides the knowledge needed for AI to continue to learn and evolve.

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AI and Big Data in action

Image recognition

Speech recognition

Self-driving car

Consumer finance