Artificial Intelligence
Overtakes Human Intelligence:
*Reality, Possibility, or Fantasy?*

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What is Intelligent

- The general mental ability of living creatures for understanding, planning, solving, abstraction, expression, language, learning, etc.

- The three types of intelligent (triarchic theory, Robert Sternberg)
  - Componential intelligent: analytical subtheory
  - Experimental intelligent: creative subtheory
  - Contexture intelligent: contextual (practical) subtheory
What is Artificial (machine) Intelligent

- Man made intelligent, mostly means intelligent generated by computing systems (cyber capacity)
- Mimic "cognitive" functions that humans associate with other human minds, such as "learning" and "problem solving"
Artificial Intelligent: **current approach**

- **Symbolism**: all methods in AI that are based on high-level "symbolic" (human-readable) representations (expert system)

- **Connectionism**: or neuronlike computing: attempt to understand how the human brain works at the neural level (deep learning)

- Behaviorism: the theory that human behavior can be explained in terms of conditioning, without appeal to thoughts or feelings,
Artificial Intelligent: current approach

Problems

- Symbolism does not work well (have done what it can do)

- Connectionism works (with the availability of big data and computing power and in limited areas of experimental intelligent), but deep learning
  - lacks of a theoretical foundation
  - does not learn, but trained (curve fitting)
  - where are the killer applications?
  - for how long?
Artificial versus Human Intelligent

- Artificial intelligent (current)
  - Non-human, intimidating
- Brain-inspirited intelligent (next step)
  - Restart to improve, new machine? but …
- Bran-like intelligent (what we want)
  - No clue
- Human’s intelligent
  - logical, linguistic, spatial, musical, kinesthetic, intra-personal, inter-personal, naturalist, graphics
Conclusion

- **Symbolism**: have theory but does not work well
- **Connectionism**: works but no theory, most importantly, it does not have intelligent
- **Brian-inspired**: how much it can improve current state-of-the art
- **Brain-like**: when we can understand how human brain works?
Conclusion: Will AI Overtakes Human

- Reality
  
  No

- Possibility
  
  Not until it has (human-like) intelligent

- Fantasy
  
  Look like