

## Robotics & AI

1. How do you define AI?  
It essentially describes how machines mimic human-like behavior.
2. Can you name at least three different sub-fields of AI?  
Machine Learning, Neural Networks, Evolutionary Computation.
3. AI has been around since about 70 years so far. Why is it booming right now?  
As technology evolves more everyday, the possibilities with artificial intelligence grow. This could be seen as a reason as to why artificial intelligence is such a widely talked about topic now.
4. Can you name at least three application sectors where robots are being largely employed?  
What are the reasons?
  - Food sector
  - Agriculture
  - Manufacturing
5. Can you identify three major challenges for a wheeled autonomous robot performing a 24h surveillance task in a large facility? (e.g., something like Mall of Qatar)
  - The robots can be easily fooled by intruders.
  - Robots lack emotions which make them hard to communicate with.
  - In order to interact with humans, robots would need to learn how to display empathy and emotions.

<https://www.weforum.org/agenda/2019/04/these-are-the-industries-most-likely-to-be-taken-over-by-robots>

<https://www.analyticssteps.com/blogs/6-major-branches-artificial-intelligence-ai>

<https://www.ibm.com/cloud/learn/what-is-artificial-intelligence#:~:text=Artificial%20intelligence%20leverages%20computers%20and,capabilities%20of%20the%20human%20mind.>