

# Introduction to Intelligent Security Systems

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August 2018 - December 2018

## What is AI?

The term AI was coined by 1956 by J. McCarthy at MIT. While there is no generally accepted definition, various techniques from many engineering disciplines are considered as belonging to AI. It involves two major branches, one dealing with the creation of intelligent machines and one dealing with the empirical science concerned with computational modeling of human intelligence. The goal of AI is to develop methods which allow us to produce thinking machines that solve problems. A great variety of techniques have been developed and applied over the years, such as:

- search algorithms
- probabilistic reasoning
- natural language processing
- belief networks

## Systemic Definitions of AI

1. Think like humans
2. Act like humans
3. Think rationally
4. Act rationally

One of the most significant papers on machine intelligence, “Computing Machinery and Intelligence”, was written by the British mathematician Alan Turing. He proposed a test known as the Turing test and this approach remains universal.

## Problem Solving Techniques

Hard computing involves precise models such as symbolic logical reasoning and traditional numerical modeling and search. Soft computing involves approximate models such as approximate reasoning and functional approximation or randomized search. The human mental process is often too complex to be represented as an algorithm, but most experts can represent their knowledge as a series of rules for problem solving.

You can find all my notes at <http://omgimanagerd.tech/notes>. If you have any questions, comments, or concerns, please contact me at [alvin@omgimanagerd.tech](mailto:alvin@omgimanagerd.tech)