

Expert Systems

1. Expert systems are a set of rules which yield true/false values
2. Based on the values obtained by training examples under these rules, the output is determined appropriately
3. Similar to multiple if/else statement
4. This is the old form of AI, Popular from 1965 all the way to the 90s
 - a. 1965: Used in organic chemistry to find out structures based on rules.
 - b. 1990: Mission control for space programs.
 - i. Checks for fuel, pressure, electricals etc before giving the go ahead
 - c. 1990: Mortgage/Loan eligibility systems.
 - d. 1995: Alice, a chatbot.
 - e. 2018: Arabic Speech synthesis system, Hanane et al, May 2018.

Limitations of Expert Systems

1. Too many rules to write down
2. Certain rules are very hard to define
3. Some rules cannot be coded, too abstract for computers
4. Rules can sometimes be unknowns, ie task of predicting Ebola