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Artificial Intelligence

CS- 53

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☆ Production System in AI

A production is based on a set of rules related to behaviour. The rules are basic representation for expert system automatic planning and some particular types of action, selection at particular time. It also provide some particular types of AI agent which perform particular types of operation about a system . A production system in AI consisted by various types of production components .

➡ The production components are defined as follows..

- i.) Global Database
- ii.) Rules of production
- ii.) Control System.

i.)Global Database

It is a central structure used by a production system consisted by heterogeneous group of data that we can implement in AI.The database organized by database structural unit , which recognized system data for production unit always verified by associated artificial agents.

ii.) Rules of Production

The rules are basically used to handle global database . The rules usually defined with a pre condition, which may be satisfied or not satisfied by the global database. If the pre condition is satisfied the rule is valuable for the production system otherwise the rules are avoided by the system.

iii.) Control System

This component of AI production system is applicable to apply both global database and rules of production system combinedly. This system also watch the global database satisfying the rules of production at the time of application requirement or not , if not then a control system fire appropriate error report to the production system.

➡Features of production system in AI

A.I Production system is consisted by a lots of features in which some of them are defined as follows:-

a.)Simplicity

A production system is unique and uniform whose structure in a production is sentence based . So it is able to perform simple job by applying conditional structure IF ,THEN , ELSE, END.

b.)Modularity

It is also one of the important feature of production system which define structural rules inside a module which are available into production system as information independently .

c.) Modifiability

It is also one of the most important feature which allow to modify the rules as per given constraints. This feature allow us to enhance skeleton rules of production system .

d.) Knowledge Based System

A production system of AI is totally based on database which store pure knowledge. Thiis part is resultant part doesn't contain any rule or programming information . The resultant part directly produce knowledge structure for the system.

➡ Searching strategy in A.I

There are two types of searching strategy implements in AI.



- i.) Uninformed search (Blind search)
- ii.) Informed search (Heuristic search)

