

Research Review of relationships between the developments and their impact on the field of AI as a whole

Here we highlight the impact of the following developments in the IA:

1) Pioneering Expert Systems

This development was adopted in the DENDRAL project launched in 1965 by Edward Feigenbaum. DENDRAL began as an effort to explore the mechanization of scientific reasoning and the formalization of scientific knowledge. This project was a set of reasoning rules based on knowledge or rules to destroy the probable molecular structure of organic chemical compounds from known chemical analyzes and mass spectrometry data. Rivaling the skills of organic chemists in predicting molecule structures, this project proved to be fundamentally important to demonstrate how rule-based reasoning could be developed into powerful tools for knowledge engineering. So the development of these pioneering expert systems not only constituted major achievement in AI but also gave both researchers and research funders a glimpse of the ultimate power of computers as a tool for reasoning and decision making.

2) Speech Recognition

The history of speech recognition systems more generally illustrates several known themes of AI research. Supported by DARPA, as part of the strategic informatics program in 1984, many institutions participated in the initiative. Following evaluation methods and criteria for the development of these carefully prescribed programs, this development and the role of DARPA have been praised by researchers in its comparative analysis of speech recognition technology. So this research on understanding the discourse was extremely important. First of all he pushed the boundaries of recognition of the AI word more generally.

3) Influence of LISP

LISP has been an important programming language in AI research, and its history demonstrates the more general benefits resulting from the efforts of AI researchers to tackle exceptionally difficult problems. LISP is also notable because it is based on ideas of mathematical logic that are of great importance in the study of computability and formal systems. This language has favored the development of computational reasoning models. So a CAD representations for reasoning with uncertainty, which have found their way into manufacturing control, medical and equipment diagnosis, and human-computer interfaces. This program is regarded by many as the first successful AI program, and the language it used, IPL2, is recognized as the first significant list-processing language.

There is a creative tension between fundamental research and attempts to create functional devices. Original attempts to design intelligent, thinking machines motivated fundamental work that created a base of knowledge. Thus we understand with the evolution of time that the AI progresses to the future and to measure in order to solve problems of great complexity in the man.

Reference:

- Developments in Artificial Intelligence
@ <https://www.nap.edu/read/6323/chapter/11>