Questions on “New Generation Projects”

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1. What was the infrastructure in 1960’s for starting up AI research? What programming languages were developed for AI research? How about other infrastructures, such as university research labs, government agencies, companies, and new disciplines like computer science and cognitive science? When was the first IJCAI conference held?

2. The period of 1975-1985 was boomtimes for AI. Then, in late 1980’s AI went into a period of so-called “AI’s Winter”. In 2000’s AI came back to boom again. What were the main motives for ups and downs of AI in the history? What has changed in 2000’s after the long period of AI Winter in 1990’s? How about the status of AI now? What AI applications do we see recently?

3. In 1982 the Japanese government started the Fifth Generation Computing Project (FGCS) project. What were the main goals and products of this project? Describe the system architecture and main components designed to be developed in this project. Use Fig. 22.2 to explain this.

4. Europe launched the ESPRIT Program in 1980’s. What kinds of AI-related projects were supported by this program? What were their impacts?

5. US started the Strategic Computing Program in 1980’s. What were the structure and goals of the research program? Use Fig. 23.2 to explain. What were the major projects? What kinds of AI technology base were funded? How is this program evaluated?

6. LISP and PROLOG were invented to develop AI systems. What are their main features? How are they distinguished from other computer programming languages? What problems were addressed by these, especially in early stages of development? How is PROLOG different from LISP? What is their current status?