
Text Session: Five Ideas About Prolog

In keeping with the theme of associating meaning with a thing by collecting of ideas about the thing, here are five ideas about Prolog:

1. Prolog is a computer programming language that was invented by Alan Colmereaur in Marseille, France in 1971. The name stands for “Programming in Logic” (the French version of that phrase).
2. Prolog was motivated by an interest in performing natural language processing (NLP), and it is closely associated with a variant of context free grammar (CFG) known as definite clause grammar (DCG). The interesting thing about this grammar is that its rules can be automatically translated into parsers on which semantic procedures can be hung.
3. The featured data type in Prolog is the relation, which happens to be one of the the popular knowledge representations associated with mental representation and cognitive processing. Thus, in Prolog, the featured data type is a classic knowledge representation.
4. Computation in Prolog takes the form of logical inference. On the surface, Prolog programs take the form of facts and rules. Under the hood, Prolog operates on sets of Horn clauses (Afred Horn) according to Robinson’s Resolution Principle (John Alan Robinson).
5. Programming in Prolog can be viewed as as two step process: (1) Establish a knowledge base, and (2) query the knowledge base. The knowledge base will consist of structured **facts** and **rules**.