This research concerns the development of an automobile malfunction diagnosis expert system. It comprises mainly of two systems: The knowledge acquisition system and diagnosis system.

The knowledge acquisition system's main task is to acquire knowledge from an expert who provides them as rules and facts of the automobile's 12 systems. Rule - based knowledge representation scheme is used where rules are expressed as IF-THEN statements. Consistency checking is constantly done to remove any cyclics and contradictions of rules in the knowledge base.

The diagnosis system accesses the knowledge base through backward chaining to identify the cause of the automobile malfunction. The system interacts with the user via a text and graphical user interface making the expert system easy to use.

The automobile malfunction diagnosis expert system has been developed on an IBM-PC microcomputer. It has fullfilled the objective of detecting rule inconsistencies in the form of cyclics and contradictions in the process of data acquisition, and also reporting the malfunction problem fast and accurate in the diagnosis system.