



Abstract

The special problem that the proponents have created is a simulation of Intelligent Vehicle (IV). This simulation software serves as a motivation for the La Salle - Dasmariñas computer science students to continue the study of artificial intelligence and appreciate how powerful artificial intelligence is. The main objective of this study is to develop a simulation software that implements searching and heuristics.

The general objective of the entire work is to develop a simulation program that will navigate a given path through the use of fuzzy logic and heuristic techniques.

The entire documentation covers the basic understanding of Fuzzy Logic and published studies on the development of artificial intelligence was initiated.

The following is the scope of the study:

- In the main program, the system will run in a controlled environment.
- Choice of location or maps is handed in to the user.
- On board controls are made simple and user-friendly.
- The system is programmed to follow forward traffic flow to simulate an actual traffic flow.
- The vehicle will choose the most convenient route.

In general, this research limits the proponents to simple applications of artificial intelligence. The proponents also limit their work to simulation prototyping since this is very difficult (both physically and financially) to construct an actual prototype.

- It will not make a U-turn on the arena.
- Obstacles are situated only to specific areas and there will be no other vehicle on the program except the one used by the system.
- There would be a fixed road map size in the system which is available for the user.
- The system to process as only one destination place