

“Title”

A

Project Report

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by

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ABSTRACT

“TSAR” – The Target Seeking Autonomous Robot is a project which is going to deal with the complexity of collision avoidance, computational processing, localization, environmental sensing and target seeking.

An autonomous robot is a self-piloted machine that does not require a human intervention to accomplish its tasks. These robots are designed to perform desired tasks in unstructured environments without continuous human guidance.

The goal of the project is to design and build a low cost autonomous vehicle control system for a ground vehicle. The vehicle must be able to navigate through the predetermined route (desired destination) and avoid obstacles while maintaining an optimum speed and also restoration of the original path to reach its predefined destination successfully.

The demonstrator system uses **BOE-BOT**. The bots are initially placed at some position (which is the referred as Home Position hereafter) and a target (Destination Address hereafter) is given to them. Then the required processing is done and the predefined path is analyzed and fixed for locomotion.

The bots are programmed such that they can detect as well as avoid all the objects in their path and no collision occurs. Collision avoidance is achieved by using infrared sensors. Once the Bot goes out of the predefined path the Path Restoration Technique comes into action in order to reach its original destination.

One possible task of an autonomous vehicle is to navigate a pre-programmed route while avoiding any obstacles the vehicle may encounter. This function is useful in applications such as

- Surveillance Robot,
- Safety System,
- House hold robots
- Autonomous Moving Robot
 - In the Air
 - On road
 - Underwater

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1.

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3. INTRODUCTION (Chapter)

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Jsfjdjffffdjj jkdfkvkjdfjlkj kfvkfvl kdnfjkdnk kjenvkjdn kjnvjcdn jnfjv kvked kevk
kvnkevkd kvnenv kevnekfn knvekfn.

1.1.1. Sub Sub Heading

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kevk kvnkevkd kvnenv kevnekfn knvekfn.

4. SYSTEM ANALYSIS

References

(As per their appearance in the chapters)