Abstract

The discussion of this paper is to develop an robotic model for hunting, tracking [7] and picking or collecting specific target-object with its autonomous capability. Autonomous Robot has been in use in multiple domains for example in surveillance, in battlefield [2], in remote locations where it is not impossible for human beings to reach. But most of the autonomous robot that exists today tends to be tele-operational [22]. This project aims to achieve the very fact to make
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the robot autonomous. The robot will be able to operate in an unsupervised manner and reach to its target-location. And here the addition of mechanical hand gives it some extra benefit of picking and collecting objects. The project aims in the application of Machine Learning [10] and fuzzy logic to attain this functionality. This project is intended to exploit the feature of neural network and make it capable of learning in an unsupervised environment and carry out its task autonomously.

References

- Change-Hoi Kim; Kyung-Min Jeung; Yong-Soo Choi; Sung-Uk Lee; Chang-Hwoi Kim; "Design Of The Unmanned Ground Vehicle&quo; ICCAS, pp 1094-1097, 2011.
- Liguo Weng; Song, D. Y. "Path Planning and Path Tracking Control of Unmanned Ground Vehicle&quo; SSST 05, pp 262-266, 2005.
- Beba. P Mandal, &quot; Pattern Recognition and Machine Intelligence&quot; Springer, 4th International Conference, Jun 27-July1 2011.
- Sungji Han, Youngjoon Han and Hersoo Hahn &quot; Vehicle Detection Method using Haar-like Feature on Real Time System &quot ; 2009.
- Yoav Freund Robert E. Schapire &quot; A Short Introduction to Boosting &quot ; Journal
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