Abstract

In this paper we aim at developing a system where in one can train robots to perform a task by performing the task once, manually. Such a system would reflect on the human methods of teaching wherein a person teaches a child how to perform a particular task by showing them how it is done by actually performing it once himself. As a child observes the teacher’s methods and actions and tries to replicate the same when he tries it himself, our system will
instill this characteristic into our robot as well. For the purpose of demonstration of such a system, we proposed to develop an algorithm via which the robot will record the actions when performed by the user during the learning phase; which is nothing but when the user is performing the action for the robot for the first time. We will devise a mechanism via which these actions can be stored, modified and replayed. Also, acceleration, and slow motion replays will also be included. We will create the prototype of a vehicular robot to demonstrate the system. The user will train the robot to run on certain paths by manually driving it once, after which the robot will learn and perform the tasks itself.

References

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Index Terms

Computer Science

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Keywords