Motion Based Controller for a Humanoid Robot

K.S.P Vijay Vardhan. 221910312019. K.L.S Akash. 221910312015. Munakutla Durga Kashyap. 221910312032. Sreekanth Reddy Syamala 221910312052

As the modern-day technologies advances every day, the access to harmful environments grows exponentially. The need for artificial remote controllers to manipulate an environment is paramount. With controllers, the complexity for precise and accurate movement is high but using a ML framework that can automatically detect the movement made by an individual and subsequently send the data to a robot which mimics the entire movement reduces the complexity for any precise and accurate movement desired by the user. This project aims to simply controlling a robot by providing a motion based system using multiple sensors and cameras to map out its current environment and to allow it to manipulate its local environment. Additionally, this project also will present the challenges faced when operating a robot with traditional guided controllers as compared to a motion based controller. This project will attempt to fully control a robot in order to completely emulate a human for the advancements of performing human actions in an environment that may or may not be suitable for human survival.