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Leap Motion Sensor Technology Based Robo-Control System

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Abstract: Through this paper, we tend to gift a Literature Survey, Proposed System & Software Requirements to code the demand of our Project. The main goal here is to form the interaction between a human hand and a robotic arm. This interaction between man & machine offers the connection between humans and pc. This idea shows the creation of a robotic arm as like the human arm as doable by not limiting the arm to at least one set of tasks. The robotic- arm is to be controlled employing a Leap Motion Controller in X, Y and Z direction, like a human hand with the robotic arm is that the basic aim of the project. There's conjointly an aim, that is to expand the practicality of the arm, once the essential model is made which might be used e.g.- a spot-welding golem. We measure more applications of this robot-like: These days, varied styles of robots are even utilized in medical industries, for the case of surgeries, the medico uses either direct or through pc management strategies to manage instruments needed. There are many additional applications which might scale back the Human efforts & result in automation like material handling, thermal spraying, welding, painting, drilling, Manhole cleaning and much more. It is known for the key problems of electro-mechanical coming up with of bilateral golem manipulators. One among the main developments that emerged within the recent past is Hand gesture, a dominant way of golem manipulators on the slave aspect of the bilateral system exploitation. The Leap Motion Controller (LMC) that relies on gesture detections is developed with the assistance of this analysis. This paper shows the optimizing of the joint mechanism designing. To use this technique in surgical sort applications, we should always implement it with high golem servos.

Keywords: Leap Motion device, Tip Imitating, Golem Manipulator, Servo Motors, Microcontrollers, Hand Gesture.

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