



FINAL YEAR PROJECT REPORT

**GESTURES CONTROLLED WIRELESS ROBOTIC
HAND VIA LEAP MOTION TECHNOLOGY**

**In fulfillment of the requirement
For degree of
BEE (Electronics)**

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ABSTRACT

There are certain uncomfortable and hazardous places where the human presence is mandatory to perform certain tasks that require work by human hand. Disposing a bomb, handling radioactive or harmful chemicals, working with high voltage equipment all can better be done under human hand, endangering the safety and health of the concerned personal.

Therefore we wanted to design a robotic hand which could be controlled with human hand gestures. So we introduced this project. The objective of this project is to wirelessly control a robotic using the natural movements of the human hand. In order to make this technology easy to use for the users, we have used the LEAP motion sensor omitting the need to wear any controller gloves or any other kind of joystick, hence the human interaction with the machine is simplified.

Making it wireless will allow users to perform immersive tasks using the natural movements of their hands remotely. The project is also capable of transmitting live video of the robotic hand's work, enabling the users to control it without having to look at the robotic hand, providing a working range at longer distances.

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