FACULTY OF ELECTRICAL ENGINEERING

UNIVERSITI TEKNOLOGI MARA

PULAU PINANG

FINAL REPORT:

HIPS EXOSKELETON ROBOTS

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ABSTRACT

Nowadays, usage of the robots is wide in this world. Many company start to use their own robot to produce their products. Big company especially automotive company like Nissan, Honda and other brand of automotive company else. They use their own robot to assemble the car part. Various way to communicate with the robot to make them move. Mostly the controller is used to make the robot move. Example of robot controller exist are joystick, computer software, microcontroller and etc.

The purpose of this project about mimicking hip movement from human hip to robot's hip. MPU6050 is used to measure the angle of our hip and send it wirelessly trough RF Transceiver. The angle of user's hip will be compare to the angle of robots leg. The difference in angle in both leg will affect the movement and the direction of DC Motor that will move the leg of the robot. The movement of robots leg will follow the movement the human's leg. If there is no difference in angle, the DC Motor will not turn as the position of both already at the same place

As the result, this project is the starting for the innovation to controlling robot by using our own movement. Usage of controller to control the robot will be decrease as the controlling robot will be easier by using our own movement. Production of the company will be increase as the controlling robot by using our own movement are more effective. So the conclusion, it will benefit the company that use the robot to manufacture their product

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