

A SIMPLE PC BASED ROBOTIC ARM

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ABSTRACT

This project consists of researches conducted to build a robotic arm using a servo motor as an actuator that can perform basic motions through controlling from a computer through serial data communication.

In this report, basic information will be introduced, and significance of using such a product will be discussed in the introduction part of the report so that reader will be able to foresee the basic structure. Then followed by the core of the report, the characteristics of each component and construction of the project, as well as the method implemented in this project will be explained.

After that, the operating system used in this project will be elaborated. To keep this an interesting report for the reader, colorful diagrams and advance explanation of the software and circuit of the how the bits of data are set from one place to another were included. Where reader can have more ideas of how the circuit works. There will also be a discussion on the outcome of the result, experimenting stage and some study conducted in the project. Besides that, the details on programming microcontroller with Proton IDE Lite and software programming with Visual Basic 6.0 are included.

Finally, in the conclusion of the report the application aspects, suggestions for further improvement and the summary of the project will be explained as a whole.