Controlling 4 Axis Delta Robot Using Mapp Technology & Developing HMI

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Abstract: *Chapter 1 is an overview of robotics, and its brief history, in which we come to know how it was initialized and who are the pioneers of robotics. Further, on which basis they are classified and at the end of this chapter there are some implemented and future applications of robotics all around the world. A literature review is in Chapter 2 and it is about the mechanics and motions of robotics further, there are brief theories on positioning, orientation, degree of freedom, and geometry involved in robotics. At the end of this chapter, servo motors are discussed in greater depth. Research methodologies are placed.in Chapter 3 where design and material selection are the main concern of mechanical design of robotic arm and what sort of hardware selection is carried out which suites best the servo drive.in Chapter 4 these mechanical and electronic hardware selections are implemented along with the best suitable power supply unit and microcontroller. Last but not least Chapter 5 is the summarized version of our achievements, limitations facing in the project, robotics in the future, cost analysis, and conclusion. We mention point-to-point references for every student who wants to ripe this fruit and enhance their curiosity.*

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