

Final year project report

Speech Controlled Wheelchair



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UNIVERSITY OF MANAGEMENT AND TECHNOLOGY

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Speech Controlled Wheelchair



A PROJECT REPORT

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DECLARATION

We declare that this thesis was composed without plagiarism and work continued here is our own basic theory that we studied from literature and adopted it in our own words with reference and this work has not been submitted for any other degree or professional qualification.

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Acknowledgments

We are grateful to The Allah Almighty who gives all the resources of every kind to us, so we make their correct use for the advantage of mankind. May He keep us with all the resources and the direction to keep helping the humanity. We would also like to thank Mr. Faran AwaisButt for their supervision and help to work hard and smart. He has been a persistent source of supervision throughout the course of this project. Their critical remarks on our work have positively made us think of new ideas and techniques. We are also thankful to our friends and families whose silent care led us to complete our project.

Abstract

A progressively general way to interrelate with machines is to simply talk to them. However, there is often an adjustment between easiness of use and system complexity. Thus, the main objective of this project is to design and implement a speech controlled wheelchair with speech recognition technology and execution of it by serial communication. For this purpose, a code is written on Arduino Uno and speech recognition is performed using easy vr 2.0, and then it commands to hardware circuit which connected to motors for its drive, Speech is a difficult and non-fixed signal produced as a result of numerous and difficult transformations, sound signal changes a lot due to many reasons so it is not possible to have 100% exact result, Result of our system are more than 80 per cent, The system as though looks surprising for disable people but we are hoping that this could be a small step for solving their everyday problems.

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Dedication

This project is dedicated to our parents for their endless support and encouragement and also dedicated to our teachers who supported us throughout the process.