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BUSITEMA UNIVERSITY

FACULTY OF ENGINEERING
DEPARTMENT OF COMPUTER ENGINEERING

FINAL YEAR PROJECT REPORT

TITLED: A REMOTE-CONTROLED MORTUARY ROBOT

BY:

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A project Report submitted to the Department of Computer Engineering in Partial Fulfillment of the Requirement for the Award of a Bachelor's Degree in Computer Engineering of Busitema University

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ABSTRACT

In Uganda and worldwide, currently the cleaning and the embalming process of the dead bodies is done majorly using human labor known as mortuary attendants who are prone to the high risks of infections inside the mortuaries. And yet mortuaries are important integral in hospital which helps for storage of un identified bodies, examination in the post mortem room or removal for autopsy.

Use of Personal Protective Equipment (PPE) is one the method the mortuary attendants use to protect themselves from infections while performing their tasks in the mortuary. However, this method is constrained by certain factors like improper use of the PPE, too much heat due to the time taken putting on the PPE while performing the tasks in the mortuaries and also some hospitals in Uganda luck the PPE for the mortuary attendants. And this is one of the reasons why most mortuary attendants are at a risk of infections in the mortuaries.

In this system, the remote is used to control the robot movement inside the mortuary and also control the manipulation of the arms in performing the cleaning, the carrying and the embalming process.

Key words: Remote, Robot, Mortuary, Mortuary Attendants, Arms, Arduino, embalming, corpse.

DECLARATION

I **OCHUDANG THOMAS AMAKE**, an undergraduate student of a Bachelor of Computer Engineering solemnly declare that this research is my original work that has been done and prepared by myself. It has not been previously or concurrently submitted for the award of any academic degree, diploma or certificate of Busitema University or any other university. The materials borrowed from other sources and included herein have been properly cited and acknowledged. All information in this document has been obtained and presented in accordance with academic rules and ethical standards of the Busitema University Senate.

SIGN: …….

DATE: ……

APPROVAL

This is to approve that this Final Year Project Report has been fully and consistently worked on and submitted to the Department of Computer Engineering under the supervision of the undersigned supervisor.

SIGN: …….

DATE: ……

Mr. LUSIBA BADIRU

Department of Computer Engineering

Faculty of Engineering

Busitema University

DEDICATION

I dedicate this project report to my dear cousin sister Mary Francis, my beloved mother Akumu Jenifer for the love and support they have provided to me throughout this project period. I also dedicate it to my project supervisor Mr. Lusiba Badru for his tremendous effort and guidance in relation to my project report, the courage, moral and support he offered to me during my research period may the almighty bless him.

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Above all, I thank God the almighty for the gift of life, wisdom and guidance for without Him, nothing would have happened and I wouldn't be able to accomplish my project stage.

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LIST OF ACRONYMS

PPE Personal Protective Equipment

RIP Rest in Peace.

ppm parts per million

HBV hepatitis B virus

HCV hepatitis C virus

HIV Human immunodeficiency virus

UV Ultra violet

EVD Ebola Virus Disease

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