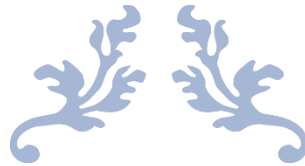


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**FACULTY OF ENGINEERING
DEPARTMENT OF COMPUTER ENGINEERING**

FINAL YEAR PROJECT REPORT

TITLED: A REMOTE-CONTROLLED MORTUARY ROBOT

BY:

OCHUDANG THOMAS AMAKE

Reg.No: BU/UP/2016/260

Email: thomasamake@gmail.com

Tel: +256779527319/ +256701601829

Supervisor: Mr. LUSIBA BADRU

**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 lack 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.

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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:

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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

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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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ACKNOWLEDGEMENT

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I cannot express enough thanks to my supervisor for his continued support and encouragement: Mr. Lusiba Badru. I offer my sincere appreciation for the learning skills provided by my supervisor. Also, I acknowledge all the other lecturers who have always given me time for consultation regardless of whether they are my supervisors or not, thank you for the helping attitude. My completion of this project could not have been accomplished without the support of my classmates; Tinkamanyire Amon, Kyazze Walid and all the other colleagues, thank you for allowing me time away from you to research and write. You deserve a trip to Germany. Lastly, I thank my family members My little sisters Joan and Mary, my Mother Mis Jenifer and finally my little brother Joseph for their support and prayers. The countless times you provided me support will not be forgotten.

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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