

Home Based Security and Safety System

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Dissertation submitted to the Faculty of Information Technology, University of Moratuwa, Sri Lanka for the partial fulfillment of the requirements of the Master of Science in Information Technology.

February 2015

Declaration

I declare that this thesis is my own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

Name of Student (s)

Signature of Student (s)



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Supervised by

Name of Supervisor(s)

Signature of Supervisor(s)

Date:

Dedication

I dedicate my dissertation work to my teacher, my family and my friends.



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Thank you very much.



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Abstract

According to the Sri Lankan Police statistics house breaking and theft incidents recorded in 2010, 2011 and 2012 was 18344, 17023 and 16759 respectively. There are considerable amount of house breaking and theft happening in every year and also considerable amount of fire and liquefied petroleum gas explosion accidents taken place around our country. In order to solve these issues it is essential to develop a security and safety system that can affordable to any household.

The system is mainly comprises of two units as security and safety. Security unit mainly detects movements and send messages to the user. Safety unit detects LP gas and smoke in the house and send messages accordingly. Whole system is designed to work without electricity for more than 3 days and cost effectively.



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