

**DESIGNING A SECURITY CONTROL AND DATABASE FOR
SMARTHOME IMPLEMENTED USING ARM MINI PC**

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

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Leaving the house unattended could make the owner feel concerned of the dangers that threaten it. Such dangers include: criminal acts form of theft, fire, and the existence of a risk of dangerous gas leaks in homes. The way to solve is to make a device which allows users to monitor their house, to receive information that is sent from sensors in the event of danger. Users can access remotely this data by using the user interface by accessing the IP address of the user interface server. All necessary data is appeared in the user interface.

The results of this thesis shows that this project can be operated and useful for the public use and to acknowledge of what is going on inside the house while they're away, as well as to control the actuator inside the house.

Keywords: Smart Home, Smart Security, ARM Mini PC, Raspberry Pi, Database, Web page, Server, Sensor, Arduino Microcontroller, Arduino IDE



DEDICATION

I dedicate this work for my mom, dad in Heaven, sisters, friends, teachers, and to all the people who supported me and gave me the opportunity to learn.



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