**ABSTRACT**

This project focuses on the use of internet of things (IoT), in particular the creation of a home security system prototype. The intended system acts as a detection device that is securely connected to an authorized computer(s) via Wi-Fi. Raspberry Pi 4 and a ESP8266 devices are the main components used in this project as they act as the motion detection device and communication media. The system behaves as follows: when a motion is detected, a home security key will provide a real-time response and send a signal to an authorized handheld device via Wi-Fi. This device would not only be perfect for residential homes but could also be used for a range of small businesses. The expectations of this system is to provide the owner with an accurate and immediate alert without any delays.