

California State University San Bernardino
School of Computer Science and Engineering
CSE 5953 Undergraduate Independent Study

Date

December 10, 2021

Time

10:30

Location

<https://csusb.zoom.us/j/98898643431>

Title

Security Alarm System with Arduino

Student

Victor Santos

Advisor

Zhang, Yan

Abstract

The purpose of this independent study is to further explore embedded systems by implementing my knowledge of Arduino into a real-world situation as that of an alarm system. In addition, this project is an attempt to gain knowledge in alarm systems for future work possibilities. This project consisted of making a system that is combination of different sensors that will give in separate inputs signals causing a trigger signal in other modules as an alert. Components used were Arduino Uno R3, the microcontroller, magnetic door sensors, pull pin sensor, motion sensors, etc. The project was done by analyzing pre-existing alarm systems and their functions, as well as research of what sensors make up the systems, and reaching out to an engineer technologist from a security system company.