

California State University San Bernardino
School of Computer Science and Engineering

CSE 595 Independent Study Presentation

Date

Wednesday, June 15, 2016

Time

11:00am – 11:30am

Place

JB 359

Title

Library Occupancy Project

Student

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Advisor

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Abstract

The Library Occupancy App monitors the number of people in a space. Dean Cesar Caballero of the John M. Pfau Library, requested people-counting functionality as an extension to the Library Study Space app developed in the Winter 2015 Software Engineering course. Previous iterations of the project featured an Android app that utilized people-counting devices and a web server to monitor the current number of people and daily level of activity in an enclosed space. The devices possessed a simple detection algorithm and were dependent on wired connections for power and network connectivity.

This quarter, the project features battery operable devices with Wifi capability, self-calibration to support a variable detection range, and improved hardware and software features to resist false-positives due to changes in lighting. Future iterations of the project may feature the ability to monitor multiple rooms at once.