

**California State University San Bernardino
School of Computer Science and Engineering**

CSE 482 Senior Project Presentation

Date

June 11, 2019

Time

1:00PM

Location

JB 359

Title

SOS Mobile Application Senior Project

Student

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Advisor

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Abstract

SOS is an emergency reporting app which features a home screen with an alarm button, a confirmation page, and a report page which allows reporting of various incidents on campus. The app also features an interactive ArcGIS map displaying the floor plans of CSUSB and the location of the event. The app has been in development for over a year and in this senior project I have implemented event reporting via a Firebase real-time database which is connected to an Esri JavaScript web map to display the corresponding floor and event using ArcGIS API for JavaScript v.4.11. This web server is hosted on an Azure cloud server with two instances running on campus. ArcMap was used to develop the maps and layers hosted with Arc Enterprise servers. In addition to the web applications and interactive maps this functionality has been implemented on both Android and IOS devices using ArcGIS Runtime SDK for Android 100.5.0 and ArcGIS Runtime SDK for IOS 100.5 all notifications, chat data and event locations are available cross-platform thanks to the Firebase Realtime database.