**Senior Design Project Sample Abstract Form  
Spring 2020**Due: 02/12/2020

**Project Name: Keyless Entry Using Facial Recognition (KEFR)**

**Department: Electrical and Computer Engineering**

**Project Participants: Bryan Takemoto/Adrian Ruiz**

**Instructor: Dr. Greg Faculty Advisor: Dr. Morris**

**Tech. Advisor: Community Advisor:**

**Special Needs/Requests for Competition Space (electricity, internet, extra space, extra table, extra easel, and/or outdoors): electricity**

**Problem your Project seeks to solve? (4 sentences max):**

**Our project aims to increase the security of a user’s home by only allowed users unlock the front door. If the door is broken down, KEFR will notify the user. We wish to implement our project with courier services like Amazon to allow the courier to drop the package inside the user’s house.**

**Solutions found in the Current Market? (4 sentences max):**

**Currently there are a number of smart doorbells on the market. Many of these products allow for two-way communication and streaming.**

**Your team’s solution, why is it better than current solutions, who will benefit? (8 sentences max):**

**Our project unlocks the user’s door which adds convenience for the user. This could allow the user with their hands full or a disabled person open the door. This project also allows other people, friends and family, enter the user’s home if the user is not there. This done using the keypad included which allows people to enter in passcodes to enter the house.**

**Project Summary (For Media Purposes):**

**KEFR is a system that allows for keyless entry with the user’s front. It does so by using facial recognition to determine if the individual lives in the house. KEFR also includes an alert system which reports the user if the door has been broken down.**