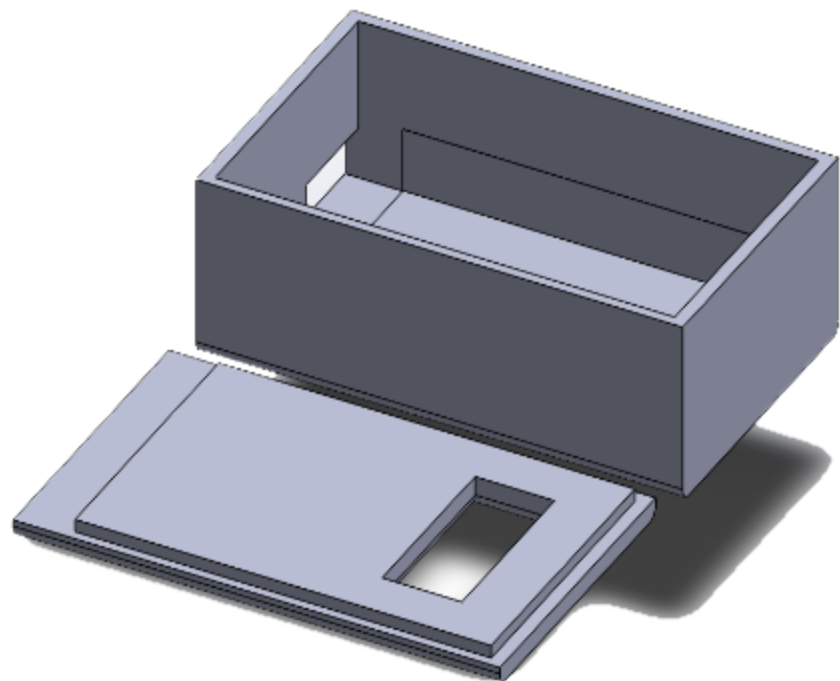# Helping the Blind See
"It's Buzzin' Buzzin'"

Created by Aidan Sharpe, Elise Heim, Caleb Amadoro, & Noah Giordano
(With Special Help From LA Connor)

The idea operates on a simple 3 stage premise, and draws inspiration from the classic white cane concept.

Stage 1- Input
   The primary input is an ultrasound distance sensor that operates over an I2C connection. It sends distance data to the arduino to be processed.

Stage 2 - Processing
   The device is controlled by an Arduino RP2040 Connect. It takes in a signal from the ultrasound sensor, and determines if the user is getting close to an object. Once the distance is small enough, the arduino begins sending a PWM signal over a digital out pin.

Stage 3 - Buzzin' Buzzin'
   The output signal, and the namesake of the device, is a small DC motor with a cam on the drive shaft, causing a small vibration to occur whenever power is applied to the motor.

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ECE101-02

Buzzin' Buzzin'