

Aerial Platform

Software / Firmware

Mission Planner

TF Lite
ML Model

Object
Detection

Bluetooth Driver

Hardware

Raspberry Pi 4

Camera

Coral

RPi
Bluetooth

F450 Drone

PixHawk Flight
Controller

RC Receiver

ESC

Buzzer

GPS

Bluetooth



Ground Platform

Hardware

TI RSLK Robot

MSP432 MCU

HC-05
Bluetooth

Motors

Analog Infrared
Sensor

Software / Firmware

PWM Driver

Infrared Driver

ADC Driver

UART Driver

Driving Algorithm