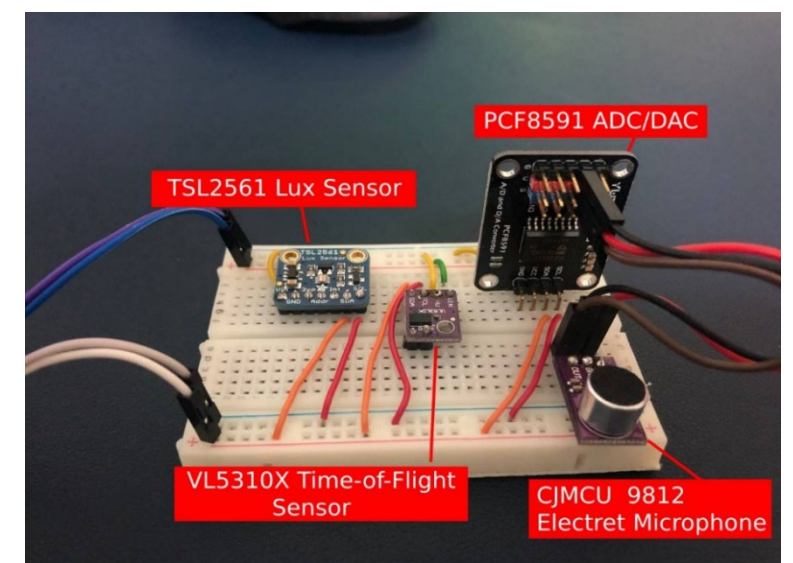
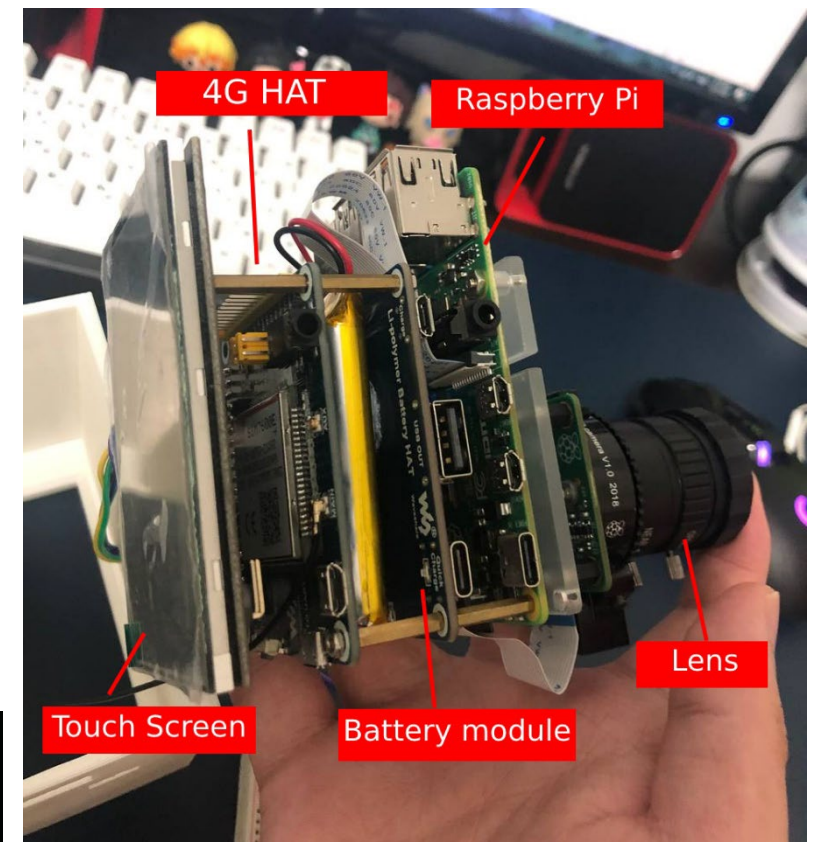
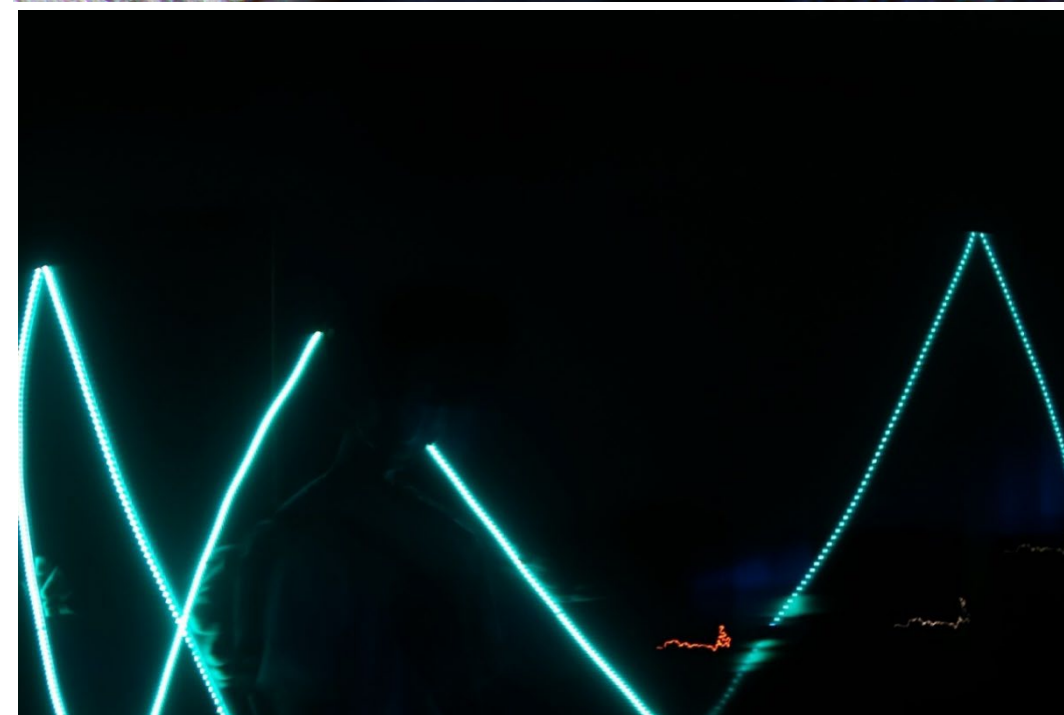
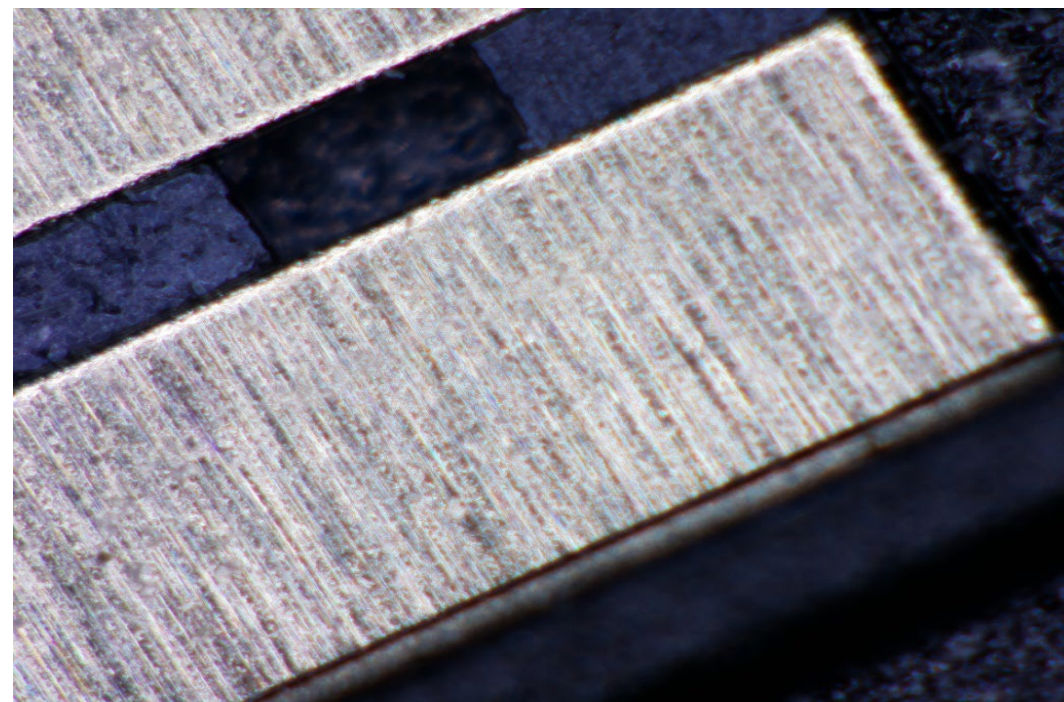


Apps for Raspberry Pi HQ Camera

CE4079 SCSE21-0389

Student: Ong Jun Sen

Supervisor: A/P Chia Liang Tien



Project Objectives:

This project will explore using cheaper alternatives to conventional DSLR usage and the ease of set up and synchronization between the camera, flash unit and the different sensors that can help trigger the image capturing process. An easy to navigate UI will also improve the user experience of people who are looking to take high-speed photography without much experience.

This project aims to incorporate a low-cost Raspberry Pi with High-Quality camera module and the many sensors that can work well with the micro-controller to build a portable and cost-effective alternative to a DSLR camera. With a touch screen, end users will be able to easily navigate the menu and adjust the settings of the camera and take clear high-speed photographs. Using Raspberry Pi as the controller allows for more computational capabilities and as such, functionalities can be added on to further improve the system. Since this system allows for portability, users will also be able to remotely control the camera via a Telegram Bot that is being hosted on the Raspberry Pi with the Internet module that is attached. This solution is aimed to be portable, user friendly and cost efficient.