

## **FACULTY MENTOR**

Lo, Yuhwa

## **PROJECT TITLE**

Viral RNA detection for the virus in the environments

## **PROJECT DESCRIPTION**

We will use an air-jet enrichment method on lateral flow assay and isothermal amplification technique to detect viral RNAs in the environment.

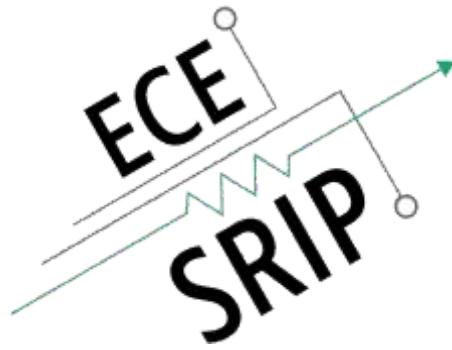
This project will be in person.

## **INTERNS NEEDED**

2 Students

## **PREREQUISITES**

biophysics, image processing, machine learning (recommended)



## **FACULTY MENTOR**

Lo, Yuhwa

## **PROJECT TITLE**

Detection of single photons for LIDAR and imaging

## **PROJECT DESCRIPTION**

Characterize and model solid-state single-photon detectors. Develop the PSPICE model for the device and apply it to LIDAR and sensing and quantum systems.

This project will be in person.

## **INTERNS NEEDED**

2 students

## **PREREQUISITES**

solid-state electronics (230A required), analog circuits (required), field-effect and bipolar transistors (230B recommended), device fabrication (recommended)