## Progress Report 4

Arihant Tiwari, 26 June 2021

## Introduction

The major tasks in the internship can be divided into two major tasks, which are:

<u>Task 1</u>: The IR sensors and the resistors package were delivered on the evening of 26th June 2021. Hence I will start working with those and hope to get a substantial decrease in the amount of noise that I am collecting.

The sensors will also allow me to collect the reflection data over a higher range hence the quality and dependability of my data set would increase.

<u>Task 2</u>: The coding part is complete as visible in the Python file attached to the document. The only thing that remains is to optimize the application and make it more user-friendly and develop the front-end portal of the application so that it seems more approachable.

For that, I have been experimenting with a lot of different libraries and styles available and exploring all the possibilities before I jump on to my final conclusion.

## **Challenges**

**Task 1**: As the devices arrived today, I am yet to start working on them. Further updates shall be edited in the submission in the future.

**Task 2:** The major challenge faced during task 2 is to make the application interface more user-friendly and appropriate for on-hand usage, as currently, it seems like an ancient computer-based application with little to no aid for the user.

## **Future Work**

The plan for my upcoming week is

- Collect transmission data from the IR Led and map the ratio of the transmission to the reflection data.
- To make the application more user-friendly and approachable.