Project Updates: 16-02-2024

Sidharth Shanmugam

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### Introduction

### • Supervision Meetings:

Consists of a listing in table format of the supervision meetings that have occurred since the last update, including dates, attendees, and a brief description of discussions and actionable items.

#### • Actionable Items Recap:

Consists of a listing in table format of the actionable items from the previous week, briefly discussing the progress made and pending tasks.

#### • Additional Project Updates:

Consists of updates that weren't 'actionable items' from the previous week, such as brief overviews of experiments conducted, data collected, and research findings.

### • Next Week's Agenda:

Consists of a listing in table format of the actionable items to complete before the next weekly update, including task descriptions, rough timelines, and success metrics.

#### • Comments & Concerns:

Consists of a brief analysis of comments or observations about other aspects of the project, such as facilities, work environment, and any outside interest in the project. Furthermore, outlines any concerns about the project.

## $1 \quad 16 \text{-} 02 \text{-} 2024$

### 1.1 Supervision Meetings

| Date       | Agenda   | Actionable Items   | Attendees  |
|------------|--|--|--|
| 13-02-2024 | <ul> <li>Showcase of simple bubble detection script and Pi Camera recording script.</li> <li>Discussed deployment of Pi Cam recording script to gather better test footage using ISA tank.</li> <li>Discussed rough plan of initial report.</li> </ul> | <ul> <li>The Pi Cam recording script should record in raw format without any compression to eliminate artefacting.</li> <li>Better test footage is required to continue work on the simple bubble detection script.</li> <li>I mentioned that I will be prioritising the initial report this week due to nearing deadline, working on hardware/software is a time sinkhole.</li> </ul> | <ul> <li>Sidharth Shanmugam</li> <li>Paul Mitchell</li> <li>Benjamin Henson</li> </ul> |

## 1.2 Actionable Items Recap

| Actionable Item  | Progress Report  | Pending Tasks   |
|--|--|---|
| • Script to record footage from RPi and Pi GS camera.          | • Script is complete, Pi Cam interfacing was successful, and I've managed to tune the lens for better focus.           | • From the last supervision meeting, I need to change the code to record in raw format. |
| • Improve bubble segmentation performance in benchmark script. | • No progress has been made<br>on this directly, I still need<br>to record test footage.                               | • Still pending.  |
| • Plan initial report & schedule.                              | <ul> <li>Rough plan has been summarised in the project journal.</li> <li>An initial draft has been started.</li> </ul> | • Still pending.  |

# 1.3 Additional Project Updates

| Additional Update      | Description |
|------------------------|-------------|
| No additional updates. | -           |

## 1.4 Next Week's Agenda

| Actionable Item          | Description  | Success Metrics                                      | Target |
|--------------------------|--|--|--------|
| Draft of initial report. | <ul> <li>Full focus will be shifted towards the initial report.</li> <li>I will need to finalise an initial draft for review by Ben and Paul.</li> <li>Needs to be prioritised due to the nearing deadline.</li> </ul> | • Initial draft in initial-report GitHub repository. | Friday |

### 1.5 Comments & Concerns

No comments or concerns at the moment.