Meeting Minutes
Date: 27 May 2019
Location: Imperial College
Present:

Project Group	Joshua Rizal Chan, Lua Ying Hao, Ng Yi Song, Patrick John Chia, Joel Yeow

Agenda
1. To provide progress updates on various components
2. To discuss project direction

Minutes

Item	Action By
1. **Leaflet**. Leaflet submitted to IBM team for feedback. ● To wait for IBM team to provide feedback ● To request feedback from academic supervisor during meeting on Wednesday (29 May 19) ● To complete leaflet after receiving feedback	Joel Yeow
2. **Hackbooth**. Require working demonstration for hackbooth on 13 June 19.	None
3. **Machine Learning Model**. ● Managed to squeeze number of parameters from 30m to 3m ● Super light model of original C3D ● Original model could only run 0.8 inferences per second (1.2s per inference), after downsizing, model can run 8 inferences per second (0.124s per inference) ● To start building end-to-end system: from camera, passing through network, output sound ● Can attain ~80% with current data collected, should try to improve to ~90% ● To continue working on speeding up inference speed with machine learning model	Lua Ying Hao, Patrick John Chia
4. **Privacy Concerns for Data Collection**. ● Due to General Data Protection Regulation (GDPR), might need signed approval to use training data from members of public -- to check requirements on use of data from public ● Volunteer needs to know what is going to happen with data after it's used	Joshua Chan
5. **Jetson Power**. Discussed continued power issue with Jetson.	Joshua Chan, Ng Yi Song

- Waiting for cable to arrive
- Could measure power drawn from Jetson in lab
- To continue working on solving power issue

6. **High Level Framework**. To start working on integrating PI with Jetson.   Joel Yeow
- All of Jetson RAM used
- Offload GPIO, other capabilities onto Pi to free up memory on Jetson
- Only one way communication between Jetson and Pi needed, depending on which device speakers are connected to
- Need to build control logic on Pi
- Possibly connect Pi and Jetson using GPIO pins

7. **Dataset**.   Joel Yeow
- Training attempted on dataset with low level of diversity, all angles in training data with group members
- Low validation accuracy when validation set contained videos from non-group members
- Inclusion of angles other than straight (ie left and right angles) might be reducing robustness of training
- To process dataset to remove other angles

Action Items

S/N	Para	Action	Party	Deadline
1.	1	To complete leaflet after receiving feedback	Joel Yeow	31 May 19
2.	3	To start building end-to-end system for machine learning	Lua Ying Hao	31 May 19
3.	3	To continue working on speeding up inference speed	Lua Ying Hao, Patrick John Chia	-
4.	4	To check requirements on use of data from public	Joshua Chan	31 May 19
5.	5	To continue working on solving power issue with Jetson	Joshua Chan, Ng Yi Song	-
6.	6	To integrate Pi with Jetson	Joel Yeow	31 May 19
7.	7	To process dataset to remove angles other than straight	Joel Yeow	31 May 19