School of Informatics & IT

**Diploma in Applied Artificial Intelligence**

AY2023 Semester Level 3

**MP Weekly Project Progress Report**

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| **Project Title: Nvidia TX Autonomous Vehicle** | |
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| **Supervisor Name: Mr Tan Sio Poh** | **Week No: 6** |

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|  | **Tasks Completed** |  |  |  |  |  |
|  | Rolled back both systems to ubuntu 18.04 |  |  |  |  |  |
|  | Set Up of Network |  |  |  |  |  |
|  | Flashing the Arduino and getting the Arduino cable (USB-B) |  |  |  |  |  |
|  | Compilation of most packages and libraries |  |  |  |  |  |
|  | Got the robot working |  |  |  |  |  |
|  | Nvidia drivers were not installed (Do not need) |  |  |  |  |  |
|  | Tested RL on the robot -> Poorer performance than Ryu’s CNN |  |  |  |  |  |
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|  | **Issue/Risk Tracking** |  |  |  |  |  |
|  | Issue/Risk Name |  | Status | | |  |
|  | Faulty switch fails to activate the battery into a constant power state to the polulu board (Green). This causes the motor to not receive power. Solution is to go to Sim Lim square to get a replacement switch and work with Dr Yap to fix the switch. |  | Not Done: Schedule on Tues to get the parts. Meeting with Dr Yap not set | | |  |
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|  | Configuring the image recognition model to work with movement (see traffic sign -> turn left). There is some refining to be done |  | Partially Done | | |  |
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|  | **Meeting minutes with MP supervisor** | | | | |  |
|  | Went with Ryu to Sim Lim Square to buy the switches | | | | |  |
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|  | **Weekly Self-Reflection** *(no more than 150 words)*  This week we went to Sim Lim square to buy the switches to fix our robot. After that we decided to fix the robot ourselves. The meeting with Dr Yap has not been set. This week however we decided to delve into Re enforcement learning on our robot. We built a model and converted the model file into a caffe model as we have done with the original model. It however performed poorer than that of the original model and thus we will not use it. | | | | |  |
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