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** | |
| **Student Name: Maximilian See Tze Jie** | **Adm No: 2102869A** |
| **Supervisor Name: Mr Tan Sio Poh** | **Week No: 9** |

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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) |  |  |  |  |  |
|  | * Created and Tested RL (Reinforcement Learning) on the robot -> Poorer performance than Ryu’s CNN (Convolutional Neural Networks) * The robot has been fixed * The slides and documentation are done |  |  |  |  |  |
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|  | **Issue/Risk Tracking** |  |  |  |  |  |
|  | Issue/Risk Name |  | Status | | |  |
|  |  |  |  | | |  |
|  | Installation of AWS CLI and Cronjob implementaiton |  | Cannot be done: wifi restrictions | | |  |
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|  | **Meeting minutes with MP supervisor** | | | | |  |
|  | This week meeting focuses more on the documentation side of the project. This week we also focused on fixing the robots hardware. Mr Tan also passed us a much-needed adapter to help us fix the robot this week, despite the old problems being fixed new ones still occur. | | | | |  |
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|  | **Weekly Self-Reflection** *(no more than 150 words)*  This week complete the project, without that of the newer robot moving due to hardware issues on the board. This time one of the boards was not lighting up, specifically the Direction and Accelerometer board. Despite making sure that the wires are specifically attached to the correct connections we were still not able to get the robot to move. | | | | |  |
|  | I also tried to develop a software that could send data straight to the cloud to AWS for data analysis and see how the robot performs, however the Wi-Fi router we had could not connect to the internet. Therefore, even though the code is available we, cannot use it. | | | | |  |
|  | This week also marks the final week before submission, this means that of this week we spend the time refining our report, spending our last efforts to fix the ro and slides. | | | | |  |
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