School of Informatics & IT

**Diploma in Applied Artifical Intelligence (AAI)**

AY2022/2023 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: 2** |

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|  | **Tasks Completed** |  |  |  |  |  |
|  | Flashing the Nvidia bot to 20.04 focal ubuntu for ros2 |  |  |  |  |  |
|  | Downloaded the required Ros Packages |  |  |  |  |  |
|  | Set up the network for the robot |  |  |  |  |  |
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|  | **Issue/Risk Tracking** |  |  |  |  |  |
|  | Issue/Risk Name |  | Status | | |  |
|  | Understand Arduino (How to turn it on) |  | Not Done | | |  |
|  | Flashed Nvidia Jetson |  | Done | | |  |
|  | Upgraded Nvidia jetson to ubuntu 20.04 from 18.04 |  | Done | | |  |
|  | Get the robot to move WASD first (front,left, right, backward). Manual control  GAZEBO simulation of the robot, left right forward in simulation |  | Done  Done | | |  |
|  | **Meeting minutes with MP supervisor** | | | | |  |
|  | Shown a proper demo connecting and turning the bot on  Showed all commands to call the different files to get the bot to move | | | | |  |
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|  | **Weekly Self-Reflection** *(no more than 150 words)* | | | | |  |
|  | I had a more comprehensive explanation of the bot's functionality. We managed to allocate more time for planning the distribution of tasks. My objective for the week was to explore ros2 on the robot, which is an updated version of ROS. However, encountering difficulties in coding the ARDUINO for proper functionality has caused a delay of a few days. Once this issue is resolved, my focus will shift to coding the camera and motor, which depends on the ARDUINO's integration. On Tuesday, I plan to examine the connection of the ARDUINO on the older robot. As of now, the priority lies in successfully programming the ARDUINO and motor, with the camera being secondary. In the event of camera failure, we will adapt the older robot's features to the newer one. | | | | |  |
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