Project Status 1 1st Report THU ETS 16th December, 2024

1. Our Goal

At the beginning, it's necessary to explain our understanding of the BFMC projects and goals.

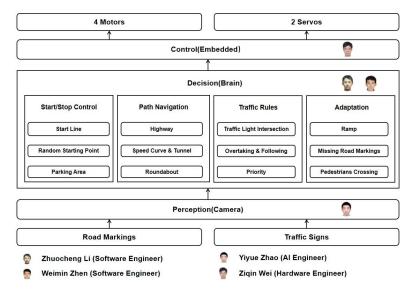


Figure 1 The global framework and assignment of our project

In line with the three processes of autonomous driving (perception \rightarrow decision \rightarrow control), we have assigned these three parts with AI engineers, software engineers, and hardware engineers into these parts, as shown in Figure 1.

Our goals are:

- (1) Complete requirements of the BFMC competition;
- (2) Leverage what we've learned to design innovative and distinctive algorithms;
- (3) Improve our own ability and exercise team cooperation in the competition

2. Work already done

- (1) Brain Setup (Figure 2(a))
- (2) Embedded Setup (Figure 2(b))



(a) Brain setup



(b) Embedded setup

Figure 2 Setup work already done

(3) Make the car alive





(a) Output of car

(b) Dashboard of car

Figure 3 Setup of car

As the Figure 3(b), we switched on the Brain. We also switched the Embedded to alive (Figure 3(a)). However, we met some problems and we couldn't get the car to run. We will consult on the website and resolve the current problem afterwards.

3. Future plan



Figure 4 Future plan of our project

Based on competition data and our division of labor, we used Notion to list future work and corresponding time schedules, as shown in Figure 4.

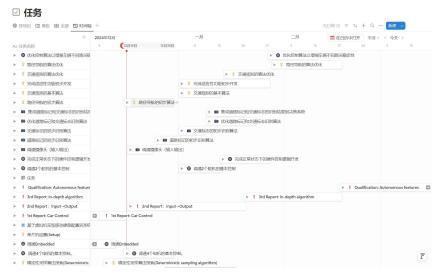


Figure 5 Time schedule of our project with the Gantt chart

According to the "Regulation" and "Documentation" provided by the BFMC, we conduct a Gantt chart to illustrate our time schedule, as shown in Figure 5. In the future, we will make a weekly appointment for offline discussion and regularly go to the laboratory for collaborative work (except during the final exams and Spring Festival of China).