

Weekly Report

5/14

1. Summary of Weekly Progress

- Add voice to subtitles
- The first version is roughly completed
- Researching semantic segmentation and selecting model
- Try to applied control net to stable diffusion
- Trying intermediate algorithms to test their feasibility

2. Task Assignments and Contributions

Team Member	Assigned Tasks	Completion Status
徐浩哲(01157030)	1. try to applied control net to stable diffusion	in progress
翁子翔(01157048)	1. Researching semantic segmentation and selecting appropriate models 2. Trying intermediate algorithms to test their feasibility	1. Complete 2. In progress
蔡豐蔚(01157010)	1. Add voice to subtitles 2. The first version of the frontend and backend connection	1. Complete 2. Complete

2.1. Comments

Comments

Comparing the version that applied ControlNet with the version that did not, we found a significant improvement with roads. However, new problems still emerged.

Applying panoptic segmentation to existing images, identifying suitable models, and conducting empirical evaluations

Currently using the shi-labs/oneformer_cityscapes_swin_large model

The initial stage of the current algorithm for generating prompts remains the same as the original. However, panoptic segmentation and morphological operations have been added in the middle of the pipeline. The correct approach to applying morphological operations is still not fully understood

I completed the subtitles and audio files for the last video, and also connected the frontend and backend. Currently, the frontend can upload 2 photos, and then after being processed by the backend, the transition video is displayed on the frontend web page.

3. Challenges and Issues Faced

- the output from my prompts without control net guidance is a bit strange
- only found control pipeline fit for SD1.5
- prompting may need to adjust
- There are better models available, but they cannot be used due to installation issues
- Not sure it's necessary to enhance panoptic segmentation
- The algorithm is still not clearly defined
- Adjust the prompt for generating subtitles

4. Next Steps and Goals for Next Week

- adjust prompts
- Improve the algorithm
- The video timeline needs to be adjusted

5. Additional Notes/Comments