2025

无人渡我，我亦成舟

我最大的依靠不是别人，而是自己；面对人生的风浪，我既是那个需要过河的人，也是那艘唯一能载我过河的船。

January & February, 2025

Weeks

Interests
1. ✓ 撰写个人 2024 年度总结报告；
2. ✓ 起笔大学四年总结报告；
3. ✓ 构建起基本完整的社交网络，以及关系的定量分析；
4. ✗ 构建西电科社传承指南站点。

Learning
1. ✓ 完成 GAMES101 课程学习以及图形学领域的相关知识；

Research
1. ✗ 总结鲁棒性提示学习的研究工作，汇总相关思路笔迹，归档科研习惯、写作技巧等心得；
2. ✓ 阅读三维人脸重建领域的研究论文，复现最新研究成果以及探究科研思路；

March, 2025

Week 1: 了解研究方向

February 14
1. ✓ Read *Gaussian Head Avatar: Ultra High-fidelity Head Avatar via Dynamic Gaussians*;
2. ✓ Read 《三维人脸成像及重建技术综述》 and summary;

February 18
1. ✓ Set up data collection and processing pipeline—VHAP;

February 19
1. ✓ Read *Learning a model of facial shape and expression from 4D scans* and make a summary

February 20
1. ✓ Finished configuring the experimental environments and training pipelines—GaussianAvatar;

Week 2: 完成毕设中期工作

研究 GaussianAvatars 论文及项目，完成毕设中期检查报告

February 21
1. ✓ Read *GaussianAvatars: Photorealistic Head Avatars with Rigged 3D Gaussians* and make a summary;

February 23
1. ✓ Explore the VHAP working pipelines and learn the FLAME model;

Week 3: 调研数字人 Audio-Driven 研究脉络

1. 调研方法和目标
   1. 搜集近年来相关研究论文，整理归纳；
   2. 阅读每一篇论文并进行简要总结：总结研究任务，方法，存在的挑战；
   3. 汇总所有论文总结，形成综述报告；
2. 论文追溯
   1. Inspiration: 从论文中追溯启发的文章；
   2. Basic Model: 从论文中积累经典的模型结构；

March 4
1. ✓ Read *EMO: Emote Portrait Alive - Generating Expressive Portrait Videos with Audio2Video Diffusion Model under Weak Conditions* and make a summary;

March 5
1. ✓ Read *MO2: End-Effector Guided Audio-Driven Avatar Video

Generation and make a summary;

March 6
1. ✓ Read *VividTalk: One-Shot Audio-Driven Talking Head Generation Based on 3D Hybrid Prior* and make a summary;
2. ✓ Read *Lip Movements Generation at a Glance* and make a summary;

March 7
1. ✓ Read *[GAN-Based] [CVPR 2017 Speech2Vid] You said that?* and make a summary;
2. ✓ Read *[GAN-Based] [CVPR 2019 FacialAnimation] Realistic Speech-Driven Facial Animation with GANs* and make a summary;

Week 4: Paper Reading

March 10
1. ✓ Determine the roadmap of research survey;

March 18
1. ✓ Determine the research direction of *3D Real-time Audio-driven Talking Head Generation*;

March 23: Adjustment
1. ✓ Reading paper in the morning and coding in the afternoon;
2. ✓ Learning in the evening and make a daily summary;

Week 5: Paper Reading

March 24
1. ✓ Read AD-NeRF, ER-NeRF and make a summary;
2. ✓ Read the codes of GuassianTalker;

March 25
1. ✓ Read the *Efficient Region-Aware Neural Radiance Fields for High-Fidelity Talking Portrait Synthesis* and make a summary;

March 26
1. ✓ Read the *Real-time Neural Radiance Talking Portrait Synthesis via Audio-spatial Decomposition* and make a summary;
2. ✓ Summarize the section 1 of Scratchapixel;

March 31
1. ✓ Add the UNet Network to enhance the GaussianAvatar and finish coding;
2. ✓ Finish writing the *Introduction* of the undergraduate thesis;

April, 2025

1. Adjust Shedules
   1. Spend two weeks on finishing the research survey and the summary slides;
   2. The last two weeks will be taken to finish the undergraduate thesis.
2. Fruit Display
   1. A good designed and reseabled slide;
   2. A well organized thesis and the prepared project;

Week 1: Research Survey and Not Continued

April 1
1. ✓ Scan the collected papers;
2. ✓ Make the template of summarized slides;

April 2
1. ✓ Read a research survey and make a summary;

Week 2: Quickly Overcame the Undergraduate Thesis

1. ✓ Finished the undergraduate thesis;

Week 3 to 4: I don't know. It's a mess.

1. ✗ What I have did? I don't know.
2. ✓ Read the LAM paper and tried to reproduce it.
3. ✓ It seemed that I was also dedicated to 3DAvatar Viewer.

May, 2025

Week 1: Labour Vacation

May 1
1. ✓ Have a good rest in my room and have nothing to do;

May 2
1. ✓ Go to the laboratory and have a short walk along the Shenzhen Bay at dusk;

May 3
1. ✓ Have a meal with relatives and friends;

May 4
1. ✓ Go to the Lotus Pond Park with relatives and friends;

Week 2: Debugging the 3D Avatar Viewer

May 5
1. ✓ Summary all things and stay motivated;
2. ✓ Have wrote an essay about my trip in Labour Holiday;
3. ✓ Debugging the 3D Avatar Viewer and seemed have founded one problem.

May 6
1. ✓ **Working**: Retraining the GaussianAvatars with saving global position, scale, rotation;
2. ✓ **Working**: Failed debugging and change to reproduce the OpenChatAvatar;
3. ✓ **Wealther**: Dense rain, thick fog and rolling thunder;

May 7
1. ✓ **Working**: Have a better understanding and verify the data loader, but not be sure yet;
2. ✓ **Wealther**: Dense rain in the morning and become wet in the road;

May 8
1. ✓ **Working**: Have founded a good problem in 3DAvatar Viewer but still struggled to solve it;
2. ✓ **Emotion**: Tired of this debugging and go home directly at night;

May 9
1. ✓ **Working**: Still keep motivated to face with it and I donn't know what will happen; —writing in the morning
2. ✓ **Plan**: Just to decompose the long JavaScript codes into several well-organized files and make a summary about the codes structure;
3. ✓ **Emotion**: A little excited because of the Friday;

May 10
1. ✓ **Vocation**: Have a good Saturday and reset without going out.

May 11
1. ✓ **Doing**: A prepared day for returning to Xian.
2. ✓ **Emotion**: Have a dinner together with all senior brothers.

Week 3: 本科优秀毕业生评选

1. Meeting
   1. Have a talk and a photo together with the reachable friends;
   2. Go to dinner with all roommates and pull the hearts together.
2. Working
   1. Update the blog of SRRS and the github repository.
   2. Advance the undergraduate thesis and make sure all materials best and ready;
   3. Struggle to finish the 3D Avatar Viewer. Must be successful.
3. Hobbies
   1. Release a blog about the logginng media and summary sheet;
   2. Open a gallery page in blog to show the whole life trip;
   3. Go to have a good look about the Xidian University and take photos for essay writing.
4. Living
   1. Sell the unused things to the next generation for clean up old but still good things.

May 12
1. ✓ **Trip**: Taking a flight from Shenzhen to Xian.
2. ✓ **Shedules**: Making several working and living tasks to fin-

ish.

May 13
1. ✗ **Trip**: Have forgot what I did.

May 14
1. ✓ **Working**: Reproduce the results of the 3D Gaussian Avatar Viewer.

May 15
1. ✓ **Hobbies**: Finishe the goal of **Open a gallery page**.

May 16
1. ✓ **Meeting**: Have a hearty dinner with some roommates.

May 17
1. ✓ **Working**: Testing the render but got bad results.

Week 4: 本科毕设之软硬件验收

May 19
1. ✓ **Working**: Finding the problem of GaussianAvatar Viewer and achieved the static rending.
2. ✓ **Meeting**: Have a good dinner and rest with best friends.

May 20
1. ✓ **Working**: Just do nothing but tuning the LAM viewer without any production.
2. ✓ **Fitness**: Running for 2km in the playground but got hurt on foot.

May 21
1. ✓ **Working**: Make sure to be fully prepared for tomorrow's hardware and software inspection.
2. ✓ **Rest**: Just have a good rest for my hurt foot.

May 22
1. ✓ **Working**: Successfully passed hardware and software inspection and got the high score of 94.

May 23
1. ✓ **Living**: Still have a day spent in the dorm.
2. ✓ **Working**: Revised my undergraduate thesis and then finalized it.

May 24
1. ✓ **Working**: Upload my undergraduate thesis and preparing the presentation slides for the final defense.

Week 5: 本科毕设之终期答辩

May 27
1. ✓ **Working**: Apply the honor of graduate star, preprint the thesis and materials, make the slides.

May 28
1. ✓ **Working**: Attend to the final defense and got the highest score in the group.

June, 2025

Week 1

Header 2

July, 2025

Week 1

Header 2

August, 2025

Week 1

Header 2

September, 2025

Week 1

Header 2

October, 2025

Week 1

Header 2

November, 2025

Week 1

Header 2

December, 2025

Week 1

Header 2