

sdmay18-20: A Disappearing A Pillar

Week 8 Report

November 6 - November 13

Team MembersShengliang Liu — *Program Tester*Guantong Zhou — *User Interface Programmer*Han Liao — *User Interface/Image Acquisition Programmer*Wenrui Wu — *Team Communicator*Yixuan Wang — *Image Processing Programmer*Yao-Wei Lee — *Webmaster/Image Processing Programmer***Summary of Progress this Report**

- 1) We found a cheap but high quality optical zoom focus tablet camera lense and attached it to our tablet.
- 2) We bought a magnetic holder which can stick our tablet to the windshield next to the pillar.
- 3) In the testing process, the tablet could display a better image than last week.
- 4) We decided to divide into two groups, one group will stay on the old path to work with programming the embedded camera, the second group will work with the external camera.

Pending Issues

The lens we acquired does not fulfill our requirements, so we are backtracking and going to work with the built in tablet camera instead.

Plans for Upcoming Reporting Period

- 1) We plan to work on the image processing with the extend camera.
- 2) We plan to write a zoom in/out function using Android Studio in our build in app.
- 3) After we finish the image processing part, we will test it again to see if we can watch through the tablet to see the missing part.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Shengliang Liu	Our faculty advisor does not need the function which is the screen cut we have done last week. We continue the test which have not finished last week. This time, as the photo shows, we can see the whole car which the driver can just see a little before. Also, we get a magnetic holder which can connect the tablet with the pillar, so there is no need to hold it.	5	36

Guantong Zhou	In the past week, we changing the working direction. We are going to use the external camera on the tablet in order to get better images. I comparing the different camera online and making the final decision. I also testing the possibility of placing the external camera outside of the car and connect the tablet with the cable without keeping the window opening.	5	36
Han Liao	I worked with my teammates to test out our app last week. We bought an external lens which we to use to zoom in/out. Unfortunately, the lens can only adjust the focal distance without zooming in. So we will think about building our own function using code to modify the image size just like what can be found in phone cameras nowadays.	5	41
Wenrui Wu	n the last week, we ordered an optical mobile camera lense online and get it attach to our tablet. My job is to test it. In the testing processing, I found that the lense could only manually adjust the focus by twisting it, and we can not get the best driver view, so we still need to write a zoom in/out function in our build in app.	5	36
Yixuan Wang	I bought the camera lens with them together, and we found that the camera lens is not adjustable in Best Buy, so we decided to buy it online. However, it is still not working. We decided to write a zoom function in our App. And also, I learned about how to change the font in our crazy pillar App to make it looks better. I changed the image and the layout.	5	36
Yao-Wei Lee	I worked on looking for a tablet mount so that it can be affixed to the A-pillar of the vehicle covering the A-pillar. I also worked on improving the touch screen functions of the App with my teammates.	5	36

