EE/CMPEN 455: Digital Image Processing, Fall 2023  
Homework 5

1. Title of your favorite project and why you think this was the best project.

Licenses Plate Recognition by Thitiwat and Raymond.

License Plate Recognition is a good topic. In the real world, license plate recognition by machine can save a lot of human resources and bring tons of benefits.

2. Describe briefly the problem solved and what the team accomplished

They try to do the license Plate recognition. They break down this problem into three parts: Number plate detection, character segmentation, and character recognition. And they accomplish two methods to do the plate recognition. In the demo, they can have the plate number recognized above the picture. However, as they said, for some reason, they can have the plate number recognized correctly on their computer, but the demo shown on the Lab computer does not generate the correct output.

3. What image processing/other insight did you gain from the team’s presentation?  
(Bulleted list preferred)

* Pre-processing is important before actually implementing the algorithm.
* Eliminating background noise for segmentation is an essential step.
* Method 1 does better with USA Noiser Plates.
* Method 1 is effective at up to close images.
* Method 1 crops out the background noise.
* Method 2 is more effective with European Plates than the USA.
* Method 2 is ineffective at up-close images.
* Method 2 uses the bounding box technique to eliminate background noise.