

Kyle Hix

CSCE 580 Final

Fall 2025

Q1a:

- a) **Towards Enhancing Road Safety in South Carolina Using Insights from Traffic & Driver-Education Data** Presented by Sai Teja Paladi
- b) An example that aligns with this paper's findings is the inability to predict sporting outcomes.
- c) The paper findings discuss that most accidents occur in areas of high population and there was a lot of previous data that was visualized. The author would have liked to get more data on specific drivers and weather during the year to better analyze the results. Predictive modeling was not used. This reminds me of the upcoming FIFA world cup. Countries with higher population are more likely to be successful because of a larger talent pool. However, just like on the road, sports have a lot of variability and can be unpredictable. We have previous data on team success, but it is hard to predict the future when humans interact.

Q1b:

- a) To prep my data, I changed the names of the given files to the date they corresponded to. Other than that, nothing else was done to the data.
- b) At first, I tried using Llama to process my data. I had issues with installing it within VS Code. I switched over to YOLOv5. I got that working, but struggled comprehending how to use it. For the sake of simplicity, I manually input the data into an excel spreadsheet. The sheet calculates each student's attendance total for the semester and daily student attendance.

c)

a.

<b>Class</b>	1	2	3	4	5	6	7
<b>Date</b>	19-Aug	21-Aug	26-Aug	28-Aug	2-Sep	4-Sep	9-Sep
<b>Class</b>	8	9	10	11	12	13	14
<b>Date</b>	11-Sep	16-Sep	18-Sep	23-Sep	25-Sep	30-Sep	2-Oct
<b>Class</b>	15	16	17	18	19	20	21
<b>Date</b>	7-Oct	14-Oct	16-Oct	21-Oct	23-Oct	28-Oct	30-Oct
<b>Class</b>	22	23	24	25	26		
<b>Date</b>	4-Nov	11-Nov	13-Nov	18-Nov	20-Nov		

- b. The median for the dataset was 33 students.
  - c. Lowest Attendance: November 20<sup>th</sup> (14) | Highest Attendance: August 21<sup>st</sup> (47)
  - d. The class saw its highest attendance early in the semester. Once the drop date had passed, the highest attended days were quiz days. Yes, there is a correlation between attendance and assessments.
- d) If I had more time to complete this assignment, I would give more effort to training a model to read the data. With it being finals week and studying for other tests, I didn't want to fight with trying to get a program to run. I took the easier route of doing tabulations myself.