Abstract of the analysis of the Washington Fatal Crash Files

The project presents a data-driven analysis of the Washington Fatal Crash Files. By leveraging the Google Map API, we successfully implemented reverse geo-coding of the original dataset and thereby acquired the zip codes of the place where the accident occurred. Based on zip code analysis, we discovered that the proportion of non-resident drivers are significantly higher that that of the resident drivers, suggesting that non-resident drivers are much more likely to be involved in fatal crash accident. Based on our analysis of driver behavioral factors, we found that there are 5 behavioral factors which contribute significantly to fatal crashes. On the other hand, our analysis of driver zip code suggests that some areas are more likely to be related to high-risk drivers.