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I completed my Bachelor (B.Sc.) in Civil Engineering and my undergraduate thesis was on Transportation Engineering which I completely focus on Trip Attraction Rates on various sizes Hospitals in the city of Dhaka. The overall ambition of my thesis is to focus on the traffic congestion of Dhaka City as Dhaka is considered to be one of the densely populated area, where huge amount of people using private transport as well as public transport. The general area of this thesis is focusing on Hospitals as Hospitals are considered to be a major source of providing healthcare to the patients and as well as a occupation spot for huge number of Doctors and Nurses. So, it is to be considered as one of the largest area of attraction to the local people living in Bangladesh. On the other hand, during my undergraduate studies I have participated on several research activities under the supervision of ASM Fahad Hossain, Assistant Professor, Department of Civil Engineering, Ahsanullah University of Science & Technology. Under his supervision, publish two of conference papers on Geo technical Engineering as well. Besides, I have actively taken part and participated on several seminars held at University premises based on research and higher study abroad. . Along with my studies, I've learned a lot about time management issue and being able to manage my time whenever it is necessary to cope up with. I feel like this research on Autonomous Vehicle (AV) will provide me a zeal in order to deal with the future prospects and been able to learn and to do research more in learning and developing in the road transportation infrastructure in future in accordance with completion my graduate program.

Currently, I am working as a Civil Engineer in a local conglomerates in Bangladesh named KDS Textile Mills Ltd. since 2019 which helps me in developing my time management skills in able to accomplish certain projects on time. Moreover, I would like to add that my previous research experience will help me in able to conduct research work in the field of *Transportation Engineering* sector. Hopefully, I will able to cope up with all the requirements that will come in my way and can able to compete in solving various problems that will arise in future. I have organized my Research statement base on some following steps which is as follows: 1) My Thesis. 2) My Approach towards Research. 3) Background. The following discussions are been explain as below.

Since, there is only a few studies conducted in regarding trip attraction rates for hospitals in whole world, this study will help the future researcher in doing research work in this field of area. I am passionate about my field of studies from my undergraduate life, which was about the Transportation Engineering sector in which I dreamed about solving equations in facing challenges in the Transportation sector of such a small country like Bangladesh. During my undergraduate studies, the name of my dissertation was on "A Comprehensive Study on Trip Attraction Rates of Different Size Hospitals in Dhaka City". The dissertation focuses on the general areas of trip attraction rates of hospitals that can be very useful in performing Traffic Impact Assessment (TIA) in Bangladesh. The study involved the estimation of trip attraction rates of eight different hospitals on various locations in Dhaka city. Hourly trip attraction rates were determined based on gross floor area, number of beds, number of employees working in the hospital and the number of parking spaces available in each hospital. The output from the dissertation was found out that, trip attraction of large size hospitals are higher than the trip attraction rates of small and medium size hospitals. Based on the study, it is expected that, the trip attraction rate data will be used for traffic impact assessment in the future, when more efficient sampling procedure becomes available. Moreover, the data would be useful in accessing the traffic impacts

### *Research Plan and Impact Statement*

surrounding a new planning of Hospitals. The results achieved are true assets for developing present road network of Dhaka city. The further study provides enough data to perform a reasonable statistical analysis and to correlate the current situations of overcoming future problems with the transport sector in country like Bangladesh.

In the year 2016, I acquired the opportunity of publishing two of my research works that focusing on Transportation Engineering field in a local conference that were held at Chittagong University of Engineering & Technology and Bangladesh University of Engineering & Technology respectively. I hope that, my research interest on Autonomous vehicles (AVs) may have a transformative influence on transportation systems. New Research may be carrying on the area in developing public health research agenda in order to frame the future of Transportation policy.