

Who do we contact when we are in need of money? Bank! Who do we contact when we are sick? Hospital! Who do we contact when we seek knowledge? The sanctuary of learning – University! At this stage of my life I desire to widen the horizons of knowledge in the field of Civil Engineering – Not just to become a better engineer but also to become an innovator while expanding my critical thinking coupled with creativity to tackle complex problems in erratic environments.

I experienced my childhood in a city where I could witness Innovation transformation and how people embraced it. Everything from fixed line telephones to wireless bar phones and now to smartphones, from CRT television to LCD and now to LED, from postbox mailing to emailing and now to Instant Messaging. Amidst of all these considerable developments, one field failed to evolve and find acceptance with time was city infrastructure. Till date the planning and designing and executing are done in orthodox philosophies. Consequently, I chose to pursue my undergraduate program in Civil Engineering from one of the reputed university of my country and contribute in developing this field.

During my final year of undergraduate program I was engaged in a project that dealt with fibre reinforced concrete. I was fortunate to take the lead a team of 5 peers who joined with the same objective as mine. My essential role was to carry research about which kind of fibre can confluence with concrete to have better impact, largely these fibres included industrial scraps. With the limited time we had, we could spend only 3 hours a day and 5 days a week on this undertaking. Of all, collecting these fibres consumed most time and the course of collection was challenging. After collecting fibres we used to compare compressive and tensile strength of fibre reinforced concrete with ordinary Portland cement concrete. We casted cubes for compressive and cylinders for tensile strength tests. Most of the tests that we carried were influenced by customary approach that is we utilized Portland cement and sand in the ratio 1:2 and cured it for 7 and 28 days. The final product indicated critical increment in compressive as well as tensile strengths.

I started working as a site engineer immediately after my undergrad for broad gauge railway networks as well as standard gauge metro networks. I learnt noteworthy arrangement of relationship building abilities since one of my key roles was to monitor the needs of labors and the site, lead overviews conveniently and casting of track plinth for Metro. After working for a while I chose to work for an Australian based organization SMEC. I was selected due to the affirmative recommendation from the previous organization and the zeal I showcased during the interview against the new challenges that were to be shouldered. This organization stirred my inventive soul through software applications like Bentley Power Rail Tracks, Staad Pro and AutoCAD Civil 3D. I played a crucial role in prestigious projects like Mumbai Metro Rail, Kolkata Metro Rail & Kochi Metro Rail by setting out curves, providing super elevation, vertical and horizontal gradients. My Manager continually observed my commitment and the outcomes I delivered and constantly ensured my abilities were utilized ideally in a few other domestic and universal undertakings that the organization took care of.

Particular encounters at both the past associations paved my way at an organization named Texmaco. My contemporary work here not only provokes me to provide design

solutions as design engineer but also expects me to execute the designs practically playing the role of site engineer. Transportation planning and designing has constantly spellbound me the most. The extensive cluster of subjects that are covered under this Masters program I would like to explore further at TU Delft. MSc in Civil Engineering is the most seasoned program in the whole of Netherlands offered at your prestigious university. I am aware of the reputation that is savored by your establishment and your distinguished faculty. The diverse culture and wide range of researches conducted at your revered university persuades me further to apply for this program.

I covet to play a pivotal role in the following projects if given a chance. Firstly – Sustainable mode of Mass Transit – Given the gravity on incessant rise in global warming, it is the need of the hour to work on substitute models of mass transit framework that reduces the usage of fossil fuels and screen the passengers conduct of movement to abate the hassles of routine journey. Secondly – Smart cars – that can communicate with other, uses the data such as traffic flow, road safety, location, speed, temporal dynamics, in accessibility and travel behavior. Thirdly – Automated Highway Transportation – Ironically, it is often discovered that, A large portion of real mishaps happen on highways due to poor weather conditions. If we could mechanize the vehicle-to-vehicle interaction and keep up explicit pace designated on the specific paths in congruence with the type of vehicles, we could maintain a strategic distance from accidents even in poorest weather condition (foggy morning).

Having said that, I'm quite captivated with the research work that is carried at your institution currently. In particular Prof. Bart Van Arem's research on Intelligent Vehicles & Prof. S.P. Hoogendoorn's research on Smart Urban Mobility directly aligns with my core interest. Studying at your university will just not uphold my resume but also drive me closer to my ambition. I vehemently contend my academic and non-academic achievements complement my need to pursue my masters at your renowned university.

Finally, I'd like to extend my gratitude to the admission committee and application review panel to give me an opportunity to express my intent.