

Statement of Purpose

Nowadays it is impossible to imagine life like it used to be in old times. One of the features that distinguish our time is the enormous improvements in Transportation Systems. “The ease of transportation is the hallmark of industrialized civilization”, experts believe. In pre-industrial times, transportation took place mostly by foot, animals, or boats. These circumstances led people having difficulties in making longer-than-usual trips, or transferring goods from one place to another. Later on, the social and economic developments in the lives of human beings revealed an ever-growing need for huge improvements in transportation systems. How were people supposed to circulate, in order to satisfy their new responsibilities, if not thanks to the huge advances in transportation?

Transportation encounters new aspects and complexities in large cities, where cars, buses, trains, metro all join in to create a dynamic situation for habitants. As an Iranian living in Tehran, a megacity which succumbs to huge crowds moving all day long, I realize the importance of improvement in transportation systems. Circulation in big cities of my homeland, especially in peak hours where the streets are so full of people, resembles an enormous chaos. Lack of experts and properly-functioning systems is vividly evident in the creation of such situation. Thus, I am eagerly motivated to pursue my education in this field and I believe that I could actually make a difference by exploiting my potential capacities, motivation and education.

Today as a 23-year-old individual I perceive that life for me has been a process of conscious evolution. The most integral part of this growth is the value system imbibed in me by my parents, teachers and my mentors and an intrigued liking for science. My way to realize this dream passed by nowhere but universities in my country, to which an entrance is granted through ultimate success in a nationwide entrance exam at the end of 12 years of study. In the year 2006, having achieved an outstanding rank of 320th among 300000 participants, I was admitted to enter universities. I chose Faculty of engineering in University of Tehran, since it is the most prestigious university in Iran, and has been ranked the best Iranian university in all rankings conducted around the world for many years. To quench my thirst for knowledge, as an undergraduate student in the field of Electrical Engineering, I followed all the courses with much enthusiasm and passion.

As I started my third academic year, the diversity of ideas and applications covered by control engineering reassured me of my chosen path and put me on the track to the multidimensional realms of systems of Control as an interfaculty field based on mathematical methods. In our modern, technical world no one could possibly deny the important role that control engineering plays in industrial societies. All activities are run well if they are aided by the impressive progresses of Control systems. Control is not only a science, but also an art which creates an optimal solution among interwoven concepts and unravels the most delicate connections between them. During the constructive years that I spent as a control engineering student, I have attained a rich awareness towards its efficient applications. The combination of my immense interests and my impressive educational background motivated me to explore different influences of control engineering, among those the possibility to control transportation systems.

The control courses that I had the pleasure to benefit from started with Linear Control Systems as the basis of control. Later on, I also apprehended digital, non-linear and optimized control, as well as new theories in control vs. classic ones. The ensemble of these courses alongside many more, not only planted in me the essential foundations, but also most importantly taught me to think better, exploit my abilities, and always look for various effective solutions to approach a matter.

As a control engineer, I feel that now I am utterly prepared to take on new steps in tightening my concentration on one pertinent aspect, and that would be to facilitate the systems of transportation. My efforts in this area would ultimately lead to a brighter future, in which people lose less time in circulation. The reduction of this time waste can create many opportunities in huge cities... The lesser the time, the more efficient the life! My primary goal is to modify the current situation into a better one and improve the quality of life both on the international and national level, for the people.

Having considered Germany's reputation for science and technology, and the esteemed status of **TU München** all over the world, I chose Germany as my destination. In addition, as an 8-year-old, I spent a year in Germany whose vivid memories have penetrated in my personality. I always knew that I would appreciate a chance to go back to the calm and prosperous environment of this country. Furthermore, during my later visits to Germany, what impressed me the most was the discipline by which the country is run. This orderly discipline is also vividly clear in transportation. The huge underground subway with metros always on time, well-constructed roads, carefully-established traffic laws, equipped railways and trains, the high quality of air and ship transportation are all direct consequences of Germany's excellence in the field of Transportation Systems. Moreover, the enriched cultural society, alongside splendid and dominating history of science in Germany, affirmed my initial adoration for this country, and the tremendous opportunities that German universities offer students with different backgrounds captivated my mind and ambitions. These unique circumstances reassured me to apply for a Master's Degree in **Technische Universität München**.

Germany's huge appetite for scientific developments inspires me to complete my significant former efforts in search of a better and more diverse future in this country. As a consequence, I would appreciate a move to Munich and a chance to study Transportation Systems in order to deepen my academic aptitude as a researcher and fulfill my intellectual, cultural and empirical potentialities as a human being. In a word, this program would lead me to a future in which I can achieve a more unique and functional method to use my knowledge in quest of further improvements in life of human beings.