Statement of Purpose
Computer Science: The art of a bi-directional deceit: The deception of wires and circuits assuming they simply conduct signals as they convey flows of bits, while scientists exploit information and concepts of computing; and, on another path, providing the illusion of a machine’s intellect to the public, which, ever so naively, choose to believe what they see.

– My Memoir (3:1:14)

It all began on an April morning as I stared at the small note-holder held-up sign I’d placed on my desk which I had ever so compulsively prepared: obsessing over which font to pick in my signature manner, until I finally decided on the opposite “Constantia” font, with its firm sharp serifs and its smart bold posture, to be the cloak of my mantra, the mystical word “Discipline”. As random thoughts flowed through my mind, I continued to admire more and more how elegantly the well-detailed writing was displayed. Every pixel was precisely placed, and every curve masterfully shaped. A figure that would have once been considered a masterpiece was now seen as an elementary composition, only a double click and a few keystrokes away from coming to existence. Holding on this note, I began to imagine many similar scenarios, and in every one of them a theme recurred: the actions of lifeless machines efficiently replacing human skill, all the while changing the definition of impossible. Unfettering my imagination, I enumerated the possibilities, the many ways humans actions can lose meaning. Exhilaration had overtaken me as the picture of “computers replacing engineers” came into perspective. With my pupils dilated, I thought that by formulating scientific concepts, even research in many scientific fields could go extinct. I paused when “Computer Science” came to mind. It all became suddenly clear to me. As long as computer-scientists progress in their studies, infantries of wire can never overcome them, for they are always at least one step ahead, holding the key to superiority. Man’s “unquenchable thirst for immortality” had tempted me to be part of such a revolutionary movement, the “last man standing” field: Computer Science.

As every exquisite symphony requires a well developed prelude, I began establishing my scientific foundation in Mathematics, with perseverance and dedication, as my orchestra. Following from my strict advocacy towards building strong fundamentals, and believing the beginning of knowledge truly to be the definition of terms, I set the language of my field as the beginning of my journey. I couldn’t tell if it was luck, but as I curiously set foot into this realm, I realized how computer science had “filtered” down its mathematics side to the “cleaner” parts, as if a connoisseur had set aside an assortment of “math-morsels” pleasing to my taste.
Feeling the breeze of euphoria brushing against me as my academic knowledge gained speed on the runway, I chose Sharif University – the best university from the nation’s offerings – as my lift to become airborne. Being unfamiliar with the system at first had me dealing with minor turbulence; however, with the guidance of my kindhearted teachers, supported by my self-discipline, craving to impress, I pounded the mid-air pavement, constantly reminding myself that I stood for a greater cause. As my schoolwork reached exceptional boundaries, though not receiving the expected appreciation did frankly dishearten me at times; awakening myself to feeling the warm gratitude of the institution, pampering me benevolently as it smiled upon me, supplied me with enthusiasm, urging me to go on.

Aiming to better comprehend and acquire an in-depth understanding of previously studied concepts, I started the trend of teaching assistantship. Little was I aware of my teaching capabilities and creative conveying methods until halfway through my first assistantship, when I heard several passed on comments about my work, admiring my “no strings attached” willingness to help. My vague comprehension of the students’ opinions became lucid when I was asked by many of them to partake in the teaching assistantship for their courses in the following semester. I best understood the kind feeling behind my students’ smiling acknowledgements in class when I was called up to the stage to receive the award for Best Teaching Assistant.

My character of reliable perfectionism was acknowledged by Professor Daneshgar when he preferred my collaboration in a delicate time-sensitive research project known as “Function Simulation Lemma Secret Sharing”. Fearless to plunge into the ocean of the unknown, I agreed to work on the project; putting my utmost effort into living up to the reputation of - as my colleagues called - being the “fire-and-forget missile”, always getting the task done. It was not long until my potential for leadership was recognized by Dr. Daneshgar, and he asked me to manage the research project, requiring me to integrate the many tasks, each with its own deadline, arriving in irregular bursts. Owing to the diligent cooperation of my research colleagues, my leadership abilities flourished, and I developed a fine insight on how the research domain ticks. Impassioned by our team’s efforts in this diversiform study, the project proceeded.

Personally, I regard the whole undergraduate process as just the introduction, the preamble. All that I have ever done up to this day seems analogous to storing piles of documents in a memory storage and throwing in a set of methods and algorithms. In the Artificial Intelligence utopia, a 16-year process of undergraduate studies could be replaced by a “loading” procedure, and the “fulfilling job” would be more efficiently be carried out by a “thinking” agent. If humans are in any way dominant to a mindless automaton, it is because of their ingenuity, their transcendent innovation, their ability to incorporate concepts of vast quantities. This virtue, invigorated by their passion of perception and drive for discovery, is what keeps them perpetually “one step ahead” of their rival.
For a student who has patiently striven to reach a praiseworthy point of proficiency, endeavoring to brand profound caliber on his moral fiber, now is the moment of truth. Now comes the point where all his accomplishments find meaning. This is my chance to serve the research community, to initiate my endeavor to thrust Computer Science towards the unimaginable. And if deemed worthy, I wish to burgeon into the strong researcher I’ve set myself to be, and also broaden my teaching contributions in USC’s salubrious environment. USC, accommodating students with its great research teams led by faculty members as Professors Shang-Hua Teng, Milind Tambe, Kristina Lerman and many others, involved with extensive and fruitful research in Artificial Intelligence (Problem Solving, Machine Learning), Computer Science Theory, and the other numerous areas which share my interest, has led me to the belief that it will provide me with the invaluable tools I need to prosper genuinely, hoping I will one day represent what USC truly stands for.

As every seemingly unpromising rock needs years of effort and support by its surroundings, carefully embracing it towards fulfillment, to cast into its “diamond within”; the journey of even an ambitious student could never be pursued to the ultimate goal in the absence of guidance from the wise. However brimming with potential the stone may be, a Michelangelo must exist to see the angel residing dormant within.