

Statement of Interests

My foremost goal is to facilitate creative thought and practical realization thereof, through the use of technology. I aim higher than simply creating effective interfaces to technology, although that is incredibly important, my objective is to enrich the human experience. I believe that graduate study in Computer Science and research in Human Computer Interaction is a calling for me to fulfill my vision:

I envisage a future where the divide between mind and machine is imperceptible.

When I was 12 years old my father showed me a “Sinclair ZX Spectrum” computer that he had bought the same year as I was born. I used its programming manual to write my first ever computer program. All it did was play a tune using short beeps of varying frequency. I felt great satisfaction on hearing the program work. This pristine joy of creation propels all my endeavors.

My father’s keen sense of design and my mother’s pursuit of devotional and classical music have influenced my penchant for the arts. My schooling has instilled in me a strong proclivity for mathematics and science. 10 years of training in Indian classical flute under Dr. Suresh Parikh have endowed me with invaluable musical skills. As a computer engineering student I sought and found solace in technology as a vehicle of creative expression.

After completing my schooling I had the opportunity of taking an extensive programming course under Dr. Ronak Shodhan (Ph.D., A.I. Purdue Univ. 1989). Under his tutelage I made my first forays into the world of intelligent machines. I am enthralled by the mere thought that a machine can quantify intelligence, store and process it to subsequently synthesize similar information and emulate or even exemplify the perfect being. My research thus far has culminated with a technical white paper titled “Facial Expression Synthesis for Entertainment Robots” and the supporting project “Bezz”. Bezz is a simulated 3D face that can carry out textual conversation accompanied by facial expressions. While working on Bezz I learnt that an integral aspect of human-machine interaction is the response by the machine to human actions. I feel that the ubiquity of intelligent machines alone will not be enough. The devices that permeate all facets of our lives must constantly evaluate our actions when we use them and adapt in ways best suited to our needs.

As an interactive computer graphics enthusiast I have been obsessed with creating computer games such as my 4th Semester OpenGL demo “Aerokombat 3D”. On to more “serious” things in my 6th Semester I invested extra effort in designing a radically attractive yet intuitive interface for a business software project called “TrueShare” in Visual Basic. It is with this project that I launched my crusade against boring interfaces. I believe software interfaces to be a vital part of human computer interactivity.

As a die hard musician I am interested in coupling traditional musical instruments with technology. My goal is to create mediating technology that augments traditional instruments and presents an artist with a greater sound palette and myriad avenues of expression. The same technology can help children and novices develop playing technique while having fun.

I firmly believe the Sanskrit value:

“agyanandhakare Guruhu pradeepaha”
“In the darkness of ignorance the Guru is the light.”

I seek this light in the pursuing further study. The engineer in me aspires to partake of the technological revolution of which the U.S. is a frontrunner. The artist in me yearns to celebrate the culture of the country which gave the world Jazz and The Blues. My deepest goal is to make machines mellifluously responsive to the subtleties of human articulation. For me, graduate study will not just be an education...it will be a large step closer to the realization of my life’s purpose:

Achieve seamlessness between creative thought and creation itself.