

Mathematical Autobiography

Santosh Vummidisingh

May 12, 2010

Pythagoras once said Numbers rule the Universe and my heart has been ruled by this statement ever since. The joy of victory and the sense of atonement whenever we solve any problem on our own are totally inexplicable in words. I think it is the profundity of this feeling that has made mathematics my chief enthusiasm since my early childhood.

The mathematics courses from high school helped me construct a strong base in the fields of Calculus, Geometry, Algebra and Trigonometry. I was in awe when I was taught the application of Laplace and Fourier Transforms to electrical signals and the way the modern day electronic gadgets functioned when fed by different types of electrical signals. My biggest inspiration to further add to this strong base has been the guidance from my elder brother, who is currently a Risk Manager at an Asset Management firm in Wall Street. He has encouraged and trained me to learn and understand more challenging topics in Calculus like discrete and continuous random variables, density functions, special distributions including binomial, Poisson and normal distributions expected value and variance, the law of large numbers, central limit theorem, conditional probability concepts and simple linear regression concepts.

Success is the progressive realization of a worthy goal. This is the motto that has always endowed me with important inspirations, whether on the occasion when I finished in the top 0.35

My penchant for mathematics, logic and analytics were rekindled with the introduction of MatLab, C and C++ programming along with programming in microprocessors and microcontrollers in my undergraduate years of study wherein I worked on a genre of programs involving various mathematical

functions.. My passion for computer programming and Mat lab techniques made me part of a 3 member team that built a navigator robot using the concepts of image processing, mat lab and C programming techniques. Our navigator robot participated in an event named PIXEL at the TECHFEST, held at I.I.T, Mumbai and our robot stood in the top 2My scores on the VARK test were :Visual: 2,Aural: 6,Read/Write: 4,Kinesthetic: 4 and I was told that I have a mild Aural learning preference.

As we all know learning is doing. It is the desire to come up with new path defying results with the extra element of surprise that makes research so fascinating. I also wish to be a cog in the wheel of such intuitive thought processing. My undergraduate education has given me a glimpse into this world of research. It has also served as a catalyst for my efforts to go even deeper, beyond the fundamentals for greater intellectual gratification. I really want to explore the field of mathematics in finer detail and learn as much as possible.I am joining Dr Martin Mohlenkamp's research group so that I can understand the finer concepts of research and this will also give me a chance to explore new domains in the field of mathematics.