When I was a freshman in high school, I took my first computer programming class. Because of my aptitude within the class, my teacher urged me to participate in a programming contest with two of my classmates. I've been interested in computers ever since. Thus, I proceeded to get my undergraduate and Master's degrees in Computer Science. As a result of this training, I am excited to pursue a Ph. D in Computer Science as well: to learn even more new things, perform research, and develop new ideas and theories.

When I was a senior in college, I became interested in research, and began to work on two research projects with two separate advisors. One of the projects was concerned with AI techniques in Chinese Chess. As a research assistant, I established a database for end play, and worked with lots of information about Chinese Chess. Since I have played Chinese Chess ever since I was five, this project was very interesting to me; this experience helped to deepen my interest and sense of fulfillment in the project.

The other project was an inspiration after I read a paper, *Voronoi Diagram for Services Neighboring One Highway*, by Dr. B. Palop. After reading the paper, I thought I could generalize the result, and I became the principal investigator in a team with Dr. Lee (my advisor) and another colleague. After considering several generalization methods with the help of Dr. Lee, I settled on finding an algorithm to govern multiple highway Voronoi diagrams. Thus, I wrote my first paper, *Time-Based Voronoi Diagram*, and it was accepted by *International Symposium on Voronoi Diagrams in Science and Engineering*, which we called VD2004.

In the summer vacation just after I graduated from college, we went to VD2004 in Tokyo, Japan. Although I was not the presenter, I conversed with other professors, and discussed some of my questions with Dr. the author of the original paper, who posed some new interesting problems. From my experience at the conference, I learned it's important to cooperate with others – it will help in drawing ideas and conclusions from others' research in the same field.

the other team's principal investigator after the conference.

I've always been interested in mathematics. I got a silver metal prize in XII Asian Pacific Mathematics Olympiad (APMO) 2000. I frequently and consistently perform well in any math-related courses; for instance, I have received the highest score in my algebra, automata, cryptography, and computing theory classes.

I like to play games which require a lot of thought, such as Chinese Chess and Rubik's cube. I also play bridge very seriously. When my partner and I were in the World Youth Team Championship in 2005, we were the best pair from Asia (the 12th out of 55 pairs) and helped the Taiwanese team to get the best result (6th) since 1995. We won the 1st runner up in Swiss Pairs after a round-robin tournament.

In addition, in the National Creative Mobile Game Competition, I designed a challenging game with very simple rules and operations. It attracted all the children in the assembly room when it was in the final. We won the Best Mind-Stimulating Award, the Best Creativity Award, and ultimately, the championship. I believe these types of games aid me in the process of designing an algorithm and quickly discovering contradictions because they help develop my spatial, dimensional, and mathematical thinking patterns, as well as improve my reasoning skills and ability to pay attention to detail.

Within computer science, I'm interested in design and analysis of algorithms, computational biology, and computational geometry. Enter different sentences for different university. With my solid math and creativity skills within your environment, I will perform very well in these areas. I sincerely hope that you will consider my application and give me an admission.