

I will be shifted from my veracity if I say that I ever expected to be interested in fields like bioinformatics and computational biology after being a student of computer science. However, when I had the chance to experience this field close enough I found it so intricate and motivating that I knew I wanted to have a career in this area. That is what persuades me to pursue a PhD in bioinformatics and computational biology. Several years from now, I picture myself as an extensive researcher into places like genome center, cancer research institute and bioinformatics research centers around the world on latest problems in the field.

The first step towards my dream of being an engineer was laid on at the department of Computer Science and Engineering (CSE) at Islamic University of Technology (IUT) one of the renowned universities in Bangladesh. A wide range of courses related to Mathematics, Statistics, Programming languages and Computer science have introduced me to a new world of science. Especially, at the final semester, I enrolled myself into the bioinformatics course. There I had the opportunity to know about topics like DNA/RNA sequences, protein sequences, gene expression, biological databases, evolutionary computing, microarray data analysis, gene feature selection etc. I was so fascinated by the subject that I decided to build my career in this area. I elected to do my final year thesis on feature selection for microarray data classification. During this period I involved myself learning software like R Bioconductor project and MATLAB.

At the completion of my Bachelor's degree I was awarded with '**IUT Gold Medal 2010**' for securing the first class first position in my department. After my graduation I joined IUT as a lecturer at the Department of CSE. Besides conducting several courses like Data Structure, Mathematical and Statistical Analysis, Statistical Packages, AI and Expert Systems and Computer Programming, I continued my Master degree as a part-time student at IUT. I decided to do my Master's thesis on employing machine learning algorithm for feature selection to classify two class microarray dataset. Even though there were inadequate experienced advice and support in this field I continued to search for the solution. My continuous persuasiveness and hard work and some assistance of my professors ultimately resulted to the completion of my master's thesis. Moreover, I worked with several undergraduate groups of student on their final year thesis especially on bioinformatics and computational biology.

After joining IUT I have published four international journals and four international conference papers as outcomes of my thesis and works with the student. Two of the selected journals are "**Linear Regression based Feature Selection for Microarray Data Classification**" accepted for publication in Int. J. Data Mining and Bioinformatics (2013) and "**Cancer Classification from Microarray Data Using Gene Feature Ranking**" published in Int. Journal of Data Mining and Emerging Technologies (2012). Two of my conference papers are "**A Modified Algorithm for Variable Length DNA Motif Discovery**" (accepted, 2013) and "**Selecting Features from High Dimensional Dataset Using Regression Analysis**" (2013).

It was in this vein, that I decided to further my career in research and it prompted my interest in the graduate program of this university. I hope my background and qualification are

suitable to enroll me into the Ph.D. program in Computer Science at University of California  
– Riverside.