

It's which is of my
greatest interest.
hence,

[Business](#), [Career](#)



It's my earnest endeavor to deserve what I want. During the last year of my undergraduate courses I with my two classmates chose one of the Graph Theory topics as the focus of our research and that whole year I found myself devoted to that very research.

This was the foremost opportunity to get accustomed with any research work of Computer Science at Bangladesh University of Engineering and Technology, the most prestigious engineering university of Bangladesh. I ended up with admirable success accomplishing the research by implementing a polynomial time algorithm for "On Vertex Covering by Weighted Paths and its Subtree variation on Trees" with viable restriction on path sets. The result can be used as path-based transfer model for machine translation which in simpler term is the translation from one language to another with the help of software. Graph Theory and Algorithm thus became my favorite choice. This incident drives my potential inclination towards research.

After completing my undergraduate courses, as I decided to stay in touch of my subject, deliberately I took the job of a Software Engineer at one of the famous research based software company of Bangladesh - Structured Data Systems Limited (SDSL). This is the place where my exposure to other research area of computer science began. While I found Data Security to be more and more challenging and there have been a lot of on-going work to secure confidential data by implementing Access Control, these are still inadequate. I became more meticulous and found Information Flow Control as the missing part of the story. I believe prospective research in this area can fulfill the requirement of Data/Information security, which is of my greatest interest. Hence, these comprise my research interest on Information Security

and Confidentiality. University of Texas at San Antonio and some of its CS faculty are involved in various potential researches in the area of Information Security and Confidentiality.

Researches like "A framework for private statistics between two participants", "Towards Formal Verification of Role-Based Access Control Policies", "A Policy-based Approach to Solving Information Asymmetry Problem in Email Systems" etc. are very closely related to my interest. The main idea here is to secure data from the intruder so that they do not have the chance to get access of the information any way. I also found Dr. William H Winsborough with other CS faculties aimed to develop a programming language where privacy policy will be embedded. This is certainly the goal of the Information Flow Control discussed in couple of the sections.

Thus the language will control the data flow that will ensure the end-to-end policy compliance. To be concise, I will be delighted to get any opportunity of working under the supervision of Dr. William H Winsborough. Let me introduce another of my research interests.

In SDSL I was involved in various Software Engineering processes. In comparison with the other processes requirement analysis still seems very vague to me. There is no such standard method that can guarantee the correct way of requirement analysis in the practical field. It is obvious from my empirical knowledge that today's software development phases are not concentrated. They are getting more agile and remote than earlier. There should be ample opportunity to develop ideas regarding the requirement analysis and other fields of software development. All my motivations

combined with my skills, academic knowledge and aptitude have geared me up to go straight with the path of research as my career.

And the very objective is to find novel results that will be applicable to subfields of Computer Science and hence will enrich the field and thus I want to achieve my own satisfaction along with world class reverence for my country. Moreover, snippets from my biography may help to determine my passion for research. Each of our four brothers has Computer Science background. Eldest brother is having his Ph. D. (Artificial Intelligence) at Tokyo Institute of Technology, Japan.

In addition my spouse, who is a Physics Masters, is on the way to achieve her second Masters degree in Material Science. She is in Rennes, France and also aimed for Ph. D. These particulars certainly portray my craving for research as quite a natural predilection. The aspiration to pursue my research in any of the aforementioned areas is definite and University of Texas at San Antonio bouts it from every aspect.