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I got my first taste of research in my junior year. I along with two of my classmates had developed an online portal providing an interactive interface for climate researchers to run different analysis on rainfall and temperature data of Bangladesh. The data spanned more than 40 years and were collected from 37 weather stations of Bangladesh Meteorological Department located across the country. We investigated the trends and characteristics in these data using a number of standard statistical techniques, time series prediction models, and clustering methods. The findings of the study were published as a book chapter by Springer in 2014.

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For my interest in the field of AI, I took a number of relevant courses in my undergrad and masters. During my senior year I took three such courses: Artificial Intelligence, Machine Learning, and Pattern Recognition and during my Masters I took Advanced Image Processing and Data Mining. After completing my masters, I have started studying deep learning techniques. Currently, I also conduct a training course ( 32 classes 2.5 hours each - spanning over four months) on Practical ML for around 20 graduates from different universities of Bangladesh. Conducting this course is helping me a lot to learn new techniques and gain a better theoretical understanding of the methods I studied earlier.

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I always had a strong inclination towards academia/I always wanted to be an academician/ I always envisioned me as an academician and as a recognition of my academic excellence, I got the opportunity to join my Alma Mater as a Lecturer just after my graduation. It has been three years of my teaching career. During this period, my ability of connecting with people, collaborating with ideas, and analyzing problems with different perspectives have increased. I have conducted a number of courses including Artificial Intelligence, Machine Learning Lab, Microprocessor and Microcontroller, and Software Development Lab. I have also designed <a number of?/quite a few?> study materials and lab assignments for these courses. As a faculty of the most renowned engineering university in Bangladesh, it has also been my responsibility to contribute towards different nationally important projects such as, Result Preparation for College admission, Development of Interactive Digital Textbooks etc. In addition to academic activities, I was actively involved in founding the Engineering Students Association of Bangladesh (ESAB), first of its kind in Bangladesh, with a goal to bring all engineering students under one roof to work closely with the Government of Bangladesh for providing engineering solutions to local problems. I also served as its Information and Communication Secretaryfrom September 2011 to November 2013.

I believe my knowledge, experience, and research interest make me a well-suited candidate for the prestigious <department of Computer Science> at <University of North Carolina at Chapel Hill>. I am deeply motivated by the works of Prof. X, Y and Z. I strongly feel, the research environment of <UNC-Chapel Hill> is suitable for me to conduct research in my area of interest. I believe I will be able to conduct novel research works with my determination, sincerity, and hard work to pursue a research-oriented career in academia.

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-> teaching motivation

-> I chose Stanford University, it houses some of the most brilliant minds in this area

-> My research interests broadly span the field of machine learning with emphasis on information retrieval, recommender systems and NLP

-- <https://forum.wordreference.com/threads/a-few-several-a-number-of-a-lot-of-many.255950/>

-> Currently, I am involved in two different research projects at my university. In one of them, we are working on an algorithm which can generate a list of relevant papers upon given an abstract of a research proposal. We are developing a multi-objective Learning to Rank algorithm, which takes into account different criteria to generate multiple lists of relevant papers, one for each criteria,and later on merges them to one single list. The research is jointly collaborated by BUET and the University of Illinois Urbana-Champaign. In the other project, we are focusing on the problem of identifying fake and modified images in social media. We are developing a method to quantify the amount of modification done on an image, without the reference of the original image. Devising such a method is of utmost significance as pointed in our user survey for credible interaction in social media. The research is jointly collaborated by BUET and the University of Toronto.

* Academic plans and research interests
* Relevant experience
* Future career goals
* Why UC Irvine would be a good intellectual fit for you

**Motivation and Research Interests:**

**B.Sc. & M.Sc. Thesis + Relevant Experience:**

**Teaching Experience**

**BSC and MSC experience**

**Career Goals:**

**Why This UNI is a good fit for me**

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-- Immediately after my graduation I joined the department as a lecturer and has been working there since.

-- With a fascination (with)to work on image understanding/natural language understanding using machine learning techniques

The field of image understanding is still emerging. Same goes for natural language understanding. We have large text corpora, however, understanding the texts and doing simple inferences are still a developing area. I feel motivated to work in natural language understanding and its intersection with image understanding.

The field of interpretable machine learning, automated reasoning, image and natural language understanding attracts me most. With a fascination to work on the intersection between <natural language and image understanding using machine learning techniques>, I want to pursue my Ph.D. in the <department of Computer Science> at <University of North Carolina at Chapel Hill>. I believe a Ph.D. in my area of interest would be the foundational step for a research career in academia.