**Study Plan**

I graduated from Bangladesh University of Engineering and Technology in Computer Science and Engineering in 2019. I observed the upward trend in the number of major security breaches and developed a keen interest in security research. I had the opportunity to work in my interest area in Samsung Research and Development Bangladesh, where I am part of the development team for a security-intensive push to talk app built for first responders. Cyber security was not one of the topics which was extensively covered in my undergrad curriculum. I started self-teaching myself ethical hacking by setting up my personal security lab to sharpen my skillset. I faced the chicken and egg problem of self-learning computer security as a young researcher. Getting hands-on experience with real-life systems is essential in order to gain domain-specific expertise. On the other hand, before being confident enough with my skillset, tampering with these systems without proper guidance is not only difficult but also potentially risky.

A chicken and egg problem in learning security for young researchers is that it is not advisable or expected that one can professionally pursue security without having the grasp of what they are doing, but the best way to learn it is also to tinker with real life it systems. I participated in a voluntary research project to bridge that gap. Ultimately I decided on pursuing a full-time masters degree since the research project required me to allocate an extensive amount of time outside my job. My university has been consistently ranked number one in engineering universities. So it was not possible to find a better ranked program here in Bangladesh. No other university here could provide me with better research facility or technical expertise that I already had access to. I started looking into programs abroad.

Queens university offers NSERC Cybersecurity CREATE program which specifically focuses on

computer security research. What stood out to about this program was its practical approach to research. Talk about the red-blue team practice. I emailed Mohammad zulkenain, whose research interest uniquely aligns with mine. I looked at multiple factors when looking for programs. Alignment with research interest, how it will help me build my skill set, international community, reputation. Queen's program ticks all the boxes. Expose myself to a multi-cultural environment. After the masters, I hope I will have the necessary

ethical guidelines and technical expertise. I want to ultimately lead an industrial research lab. The masters degree will also be a valuable addition to my resume and will help me achieve my ultimate career goal- leading an industrial research lab. After the digital Bangladesh project, there is an abundance of CS graduates. To stay competitive and specially to be a leader, a masters degree is a valuable addition. Look for the requirements in lead research scientist.

My parents live here. Family property. I have travelled to many countries. I like experiencing different cultures. But I have overstayed welcome in any countries. I feel responsible towards Bangladesh. We have the brains, but research trend is absent in Bangladesh. It is our duty to be vocal about this as young scientists.