

**Statement of Purpose-**

I aim to pursue a Master degree in Computer Science with a primary focus on networks & Information security. With this degree, I plan to work with a development organization in Afghanistan to improve access to the internet by ensuring international standard quality and develop online tools to provide quality education in local languages. Afghanistan has the slowest and most expensive internet in the world due to lack of infrastructure that has resulted in minimum penetration of broadband internet. Mobile broadband has shown promise in recent years it's still confined to urban cities which deprive the population of enormous potential benefits.

A degree in Computer Science, where I studied both wireless and wired networks in detail has provided me with a solid understanding of the discipline. My courses in Data Communications & Networks and Wireless Networks provided me with in-depth knowledge as we implemented complex networks with different architectures. In Information Security course, we applied techniques to secure user data and employed cryptography to encrypt communications between network and user. In the IoT(Internet of Things) course, we deployed sensors to take data from the environment and notify users. My final year project an Android application RentHub lets users rent cars and properties. In this project, I implemented ways to ensure the protection of both retailer and the customer requiring details to verify their identities and saving their details on a secure database. It helped me understand the sensitivity and importance of information security in networks as they are vulnerable to malware and hacking.

While pursuing my degree I want to study courses like Network Design and Management, Network Security, Database Management, Operating Systems and Cloud Computing. These core subjects align directly with my goals to enhance my knowledge about networks and position me

to work in the field. Additionally, theoretical knowledge supplemented with internships will help me better understand the Indian I.T. (Information Technology) sector. The hands-on experience with networks at the state of the art labs will provide me with a better understanding of complex architectures. This knowledge and experience will help me apply best practices and develop network systems in Afghanistan I.T sector.

During my 6th semester, a research paper opportunity led me to develop a prototype that reported patient's vitals to healthcare providers as Covid-19. It gave me insight into conducting in-depth literature reviews and research to evaluate a thesis. I believe this opportunity will help in future to manage my master's coursework.

This opportunity will let me learn and explore new ideas while studying in the India because the master's program in Indian universities has a diverse and global outlook that will shape my understanding of various Network Systems and their Management & Security. My undergraduate experience in the field and individual research place me well suited to pursue a Masters in India under the ICCR Program. The chance to work with and learn from the best professors in the field will increase my knowledge and bring me closer to achieving my goals.