

## STATEMENT OF PURPOSE

I attribute all my scholastic ventures and endeavors so far to my curiosity of exploring and learning further. Since an early age, while everyone around would focus on just learning the mathematical concepts and theorems as taught, I would often spend hours in backtracking them. I was possessed by an intense desire to explore mathematics deep down, and my elective in Computer Science in high school provided me another avenue for the same. The courses I pursued during my undergraduate degree paved the right platform for me to try hands-on new technologies altogether. There were a hundred different ways for problem-solving and almost every day, I discovered a better way to find answers to my doubts.

Following these acute interests in maths and computers, I went on to pursue my **Bachelors of Engineering in Computer Science** degree from **Chitkara University, Institute of Engineering and Technology, India**. The coursework covered all the essential core courses of computer science and the ones in which my interest grew were **Advanced Database Management System, Design and Analysis of Algorithms, Software Engineering, Microprocessor and Interfacing, Discrete Structures, Object Oriented Programming, Client Side Technologies, Computer System Architecture and Data Structures**. Further on, to add-on to my proficiency in Computer Networks, I **completed my Cisco Certified Network Associate course** offered by **CISCO Academy in 2016**. The learning experience was, undoubtedly, fascinating. My acute interest in these courses led me to learn effectively through hands-on lab activities and I always retained a position among the top students of the batch.

Besides this project, I took part in an **industry-oriented hands-on Training in Android Development and Search Engine Optimization** in the summer of **2014-2015**. I started polishing the best fundamental techniques and hacks been used in SEO, in order to make website gain ranking and reach the top of the Google listing. In this training, I created my own Blogs, i.e. one on Movies list and ratings and the other one on Tours and Travels. It allowed me to understand the usage of keywords in our blogs and the concept of audience perspective, the ranking techniques, as well as the smart and user-friendly layouts used to cast an inescapable impression on the user through statistical analysis.

In the second year, I used my technical skill set to create a live railway website to integrate the map synchronize with web services like Google Earth, Wikipedia, TerraServer with the Indian railways Train Enquiry System. The aim of the project was to help the users to check the availability of the train tickets from one location to another by using the station codes and track train's current location rapidly, by just using this website. This application was developed by using Flask framework and Python API. It was a breakthrough for me to get familiar with the programming and implementing what I learned, during my course curriculum. Also, I took training for **Android and core JAVA** in order to develop applications and games. During Android Development training, I learned few advanced features of Java which were quite useful for creating an application. To explore in depth of this technology, I **developed applications and games like Messaging Android app and Tic-Tac-Toe**.

In the third year, I **developed a live website on Organizing Events**. The main objective of this project was to provide an online platform to event organizers so that they can manage their events and keep records of the events, date and time, location, venue etc. without any extra cost paid. This application was developed by using **Django framework and Python API's**. At the end of the third year, I got placed and completed my **training as a Software Engineer Intern** in one of the most reputed companies **TiVo Corp, Bangalore, India**. The first project, I got from one of the customers

named **REVISTA**, we prepared the intermediate files used for knowledge graph merge. This project involved extracting key information like title, season, crew, etc. from a huge chunk of XML files. The second project was research-based where we extracted efficient information from wiki pages through all the possible sources to provide TYPE and SUBTYPE to each WIKI PAGE and achieved 80% accuracy under this task.

Other than TiVo Corp, I am **currently working in BNY Mellon Technology** as an **Application Developer** in **Java** with **Spring framework and RESTful architecture**. I designed projects like **Health Care Management System** for end-users to calculate its BMI, Diabetic risk, calories required per day, etc., and Metric Tool enhancement for analyzing the logging information in an efficient manner. This was achieved by creating a pearl script to extract the information in particular format and then executing that script in Java MVC which in turn displayed the output data in UI.

Motivated to gain an all-rounded personality, I have been keenly involved in many college activities. Be it technical events or socio-cultural fests, I have contributed in every way possible. I am glad to have brought a few accolades to the college as well. Through these involvements, I have emerged as a better leader and a more diverse individual.

Through participation in varied trainings, workshops, and internships, I have constantly built up my knowledge base. The more I have learned, the more I have gained interest in my field. At the same time, I have realized there is a lot to learn and explore. I aim to create applications that can enable people to achieve more in lesser time. There is so much to do and to make a significant difference, I am aware that I need to hone my skills and knowledge. I am motivated to work hard to achieve my goals and to garner the required competence to achieve my goals, I have now decided to supplement my knowledge and skills with **Master of Computer Science (Co-op)** offered by **Carleton University**.

Known for its applied approach to graduate education and backed by a strong theoretical curriculum at Carleton University, I look forward to be cultured by a distinguished faculty amongst a set of global scholars, thus inflating my acumen. Sensing a correlation with its energy and my enthusiasm to achieve goals, learning at your University, I believe it will be an ideal complement to my aspirations.

I deem to pursue my **Master of Computer Science (Co-op)** at **Carleton University** for specializing in Algorithms and Complexity, Knowledge Based and Intelligent Systems, Software Engineering, Parallel and Distributed Systems etc. Be it handling the difficult coursework or gelling in the multicultural environment, owing to my background and personal skills, I am confident that I will be able to present at best and excel at Carleton University. My academic background coupled with proven analytical, problem-solving, and leadership skills will allow me to positively contribute to Carleton University. I have always stood out for my strong dedication to the tasks that I have undertaken and the brilliance with which I have completed them. In this very spirit, I will look forward to pursuing my studies in Carleton University and be highly successful in it.

**Regards,**

**Shubham Kapoor**