“There is no passion to be found playing small - in settling for a life that is less than the one you are capable of living” - Nelson Mandela

It is not common to hear of a Telecommunication and Electronics Graduate to land up in a job as Java Application Developer in one of the renowned banks of the world - But I did it. Out of hundreds (or thousands?) of applications for a new team at BNP Paribas, Mumbai, there were only sixty recruited and from that sixty, only one came from non-Computer Science background and, that one was me. Getting through the rigorous and extremely competitive placement process at BNP Paribas instilled confidence in me that even others in the industry can gauge my potential to be a Developer. This assured me that my passion for Computer Applications is deep-rooted and this is the direction in which I want to further develop my strengths in.

My first association with world of computer programming was in my first year as a student at VESIT Mumbai. It started with writing simple application to help inventory management for the college library. This exercise instantly appealed to me and my mind started thinking on how one can solve ‘real’ issues efficiently and effectively with help of a computer program. I did not let my majors in Telecommunication and Electronics deter me from learning more about the world of programming. Rather, as a student, I consciously started looking out for opportunities to widen my understanding on the subject of Computer Science. I took active participation in events and competitions under the scope of Computer Science and even won awards and accolades for this. One of the noteworthy award was for a project (i think it a good idea to write topic of the the project) at a technical festival held under IEEE Mumbai section.

I was equally, anxious and excited, when after college I successfully managed to secure a job at BNP Paribas as a developer. At BNP Paribas I got opportunity to work on Interest Computation Module (ICM), a critical component involved in Interest and Commission computations. ICM was utilised in 12 applications and catered to 10 global financial product offerings. Working on ICM enhanced my understanding of Object Oriented design and SOLID design principles. It also helped me realise the importance of focussing on Data Modelling and Web Interface Design at an early stage in application development. My contribution to the project involved proposing and implementing the Data Model, implementation of the business layer and subsequent enhancements. At very early stage of my career, project ICM, gave me rich experience of programming and team work.

My curious attitude also made me start a small personal project simultaneously with my job. I wanted to develop a platform which can help students and teachers understand areas of improvements for better grades. Project titled “Let.Me.Pratise” was created as an online platform where high school students take Objective format tests and would get an in-depth analysis of improvement areas across multiple criteria - chapters, question formats, et al. After months of late night & weekend coding sessions, and relentless attempts to improve the system’s analytical capabilities, Let.Me.Pratise was ready for real time use. With assistance from local coaching class, I piloted my program on 40 students for 45 days. The application provided insights to both students as well as teachers and helped them increase their grades by 15%. This was one of the most gratifying project I have worked on so far.

WhiIe working on my project and researching on the topic, I came across a similar platform used at Khan Academy globally. They used machine learning for performance grading (the links to corresponding blog entries are provided at the bottom). The author, using his machine learning expertise, brought a revolutionary and insightful change in the way a student’s mastery of a topic was gauged at the academy. It fascinated me to see how use of some very simple Machine Learning techniques can make the platform far more powerful and intuitive than before. My obsession on this topic continued as I followed more blogs and attended numerous seminars and webinars pertaining to the subject. I believe that this is a field with extremely far reaching consequences and the potential to make every aspect of life better for every human. This has truly been the main turning point for my career and decision to pursue Computer Science with Machine Learning.

Currently, I am working with JP Morgan Chase & Co as an associate developer. In last 12 months i have worked on two high impact projects - Object Relational (OR) entity mapping tool & Static Data Cache (SDC). OR compared entity classes coded in Java to the database tables that were supposed to persist them and then generate a set of Sql statements for updating the database tables as per the entity’s structure. The success and acceptance of the project depended largely on the right choice of data structures and algorithms chosen to represent and compare the entity to the database schema. Since it's rollout, this tool continues to save hundreds of developer hours every month by automating a tedious and error prone task. SDC, on the other hand, is a web service for querying and updating a set of globally distributed caches collectively called the Static Data Cache. This project required me to unify the data schema and resolve anomalies in the storage semantics across various regional users of the SDC. The unified schema with the common rules of usage semantics enabled me to design a comDevious mon web interface for querying and updating the SDC which was performant and acceptable to the users of every region. Another challenge I faced was the design and implementation of the JMS based messaging layer that was used for propagating cache updates from the primary to secondary SDC instances. (My suggestion is that you rather explain in brief what did you learn and what was your contributions in these projects over what these projects are. Its too technical for both my understanding and writing). This job open a wide range of opportunities to grow, but now I am at a stage to look for a different challenge.

I am grateful for the enriching experiences my jobs and education have given me so far, complementing my keen area of learning. However, I truly believe now is the time to take the next step. It’s time to go on the adventure, not settle for ordinary, make my passion my profession. To do this I will need strong guidance from the experts in the field. I am confident Mr. X & Ms. Y from your University ABC will help me realise my full potential in this area, which will lay a strong foundation for my future. From my side, I commit you utmost sincerity, discipline and tones of passion to ensure the association is mutually beneficial.