I majored in Computer Science and Engineering, so several of my courses as part of this major directly prepared me for the role of a computer engineer. Each course in my major required extensive study about technical areas of computer science, such as operating systems, programming languages like Java, data structures and algorithms. Specifically, my final course was a capstone project in which I had to perform the practical implementation of studies I had performed so far. This course also gave me the knowledge about the design, development and analysis of software , and develop effective ways of solving computing problems, along with devising better ways of using computers.

This course is equivalent to a four year Bachelor's degree in Canada,as stated by WES. I have attached the report in the Attachments section.

About work at Uhg

My role as an Associate Data Analyst prepares me for gathering, transforming and analyzing data. I frequently collaborate with different teams for gathering functional knowledge about the information collected, to help derive better insights from it. As a data analyst, I accelerate

- Data collection process using Python. Data is collected not only from different databases such as MongoDB, Hive,Hbase,etc but also from websites through webscraping and selenium. Depending on the size of data, the technology stack also changes. I am extremely meticulous about the usage of better tools for better delivery. Hard efforts but with wrong tools are a wastage.
- Data processing by the use of Pyspark. Although python itself is an optimized tool for transforming datasets, however, since the data I work on is humongous, I use Pyspark. I also use Pandas and numpy for data cleaning.
- Building up of resilient processing engines which work independently. This helps me distribute the processing logic across multiple microservices, thereby minimizing

error and enhancing performance. The microservices communicate with each other through kafka. The output of previous microservice becomes the input of the next microservice. This helps in triaging the issues removes single point failure.

- Data inference and prediction by using Pipelines package from scikit learn in Python. I hold expertise in both, supervised as well as unsupervised algorithms. I colloborate with different teams for strategizing techniques and develop prediction engines that leverage company's revenue.
- Visualization using the best frontend technologies. I develop robust dashboards using React.js and Plotly dash which delineate results from the backend processing engines and help end users derive insights from the data.

I have been working extensively on data since past 4 years. My past experience has helped me develop strategies based on the scenarios.Since I keep myself updated with the technology stack, I have spearheaded in my past projects and have saved the organization from losses. Some of my achievements are mentioned below.

- Developed a system that predicted the members who had greater chances of getting readmitted into the hospital within a month. The decision to acquire data from a warehouse influenced the organization way too much. As a result of the diabetes prediction engines, the organization could save the amount that could have been claimed by the providers if the member was admitted post discharge.
- Developed a dashboard using tableau that predicted the member disenrollments from the organization. Since UnitedHealthCare is one the biggest health insurance providers in the US, their star-rating is a very crucial factor that helps them earn members' enrollments into

their plans. By predicting members who would disenroll, we could prevent them not only from switching to another competitor , but also provided them information about plans. The project is being extensively used by the organization and is helping to maintain the reputation in the healthcare industry.

- Accelerated the SSRS report migration process from 2012 to 2016, by automating the complete manual process using Selenium, thereby not only completing the project one month prior to the deadline, but also helped save time which was utilized on other projects. This helped team earn various bravo awards from the organization.
- Earned cash awards for delivering an hour session about Machine Learning pipelines in our internal university. This brought our data science team into limelight.

about work at Trianz

I had worked for Trianz for about 2 years. Post probation, I was deployed at the client location, Netapp India,Bangalore campus. I mainly worked as an automation engineer, but had also voluntarily worked on some other projects related to data science.

- Automated the testing of big data microservices using Python. Being a part of platform team, it was extremely important for me to ensure that data was properly transformed and fed into the destination, because most of the other teams depended on the data we produced. Hence, I automated the entire testing process and developed a framework to help team utilize it to test the other services.
- Automated data collection for testing by writing Restful webservices using Flask framework in Python. Because

flask is a light webframework, there were hardly any downtimes during data collection process.

- Boarded the team to use Django framework. This framework is very powerful and is used by most of the companies such as Instagram by facebook, Youtube, Dropbox.
- Developed a resilient web based tool, eventually came to be known as the "Data Integrity Project". This dashboard gave an indepth view of the performance of all the microservices running in Netapp's ecosystem. Information such as the amount of data ingested, number of processing failures helped the developers understand the critical reasons for processing delays and break downs.
- Built a dashboard using open source technologies such as grafana and influxdb. This dashboard projected the processing lags in kafka queues. Hence, helped developers revamp the big data services and fasten data processing tasks.
- Initiated an artificial intelligence based tool, focussing on natural language processing using NLTK package. The project aimed at automating test case generation by reading application logs. I spearheaded the project and could achieve the accuracy of 71%.

Netapp as a client has supported me with everything that I needed to perform better. Apart from project works, I had also participated in co curricular activities such:

- FoodForAll- Netapp's global volunteer campaign aimed at alleviating hunger both worldwide and in our local communities.
- Netapp's Cookathon- A culinary competition across different teams in netapp.
- Netapp Idol - An event to showcase singing.I was one of the seven finalists.