An Aspiring Data Scientist

I want to study Computer Science because I want to be a machine learning (ML) engineer. This interest was kindled in me last year, while pursuing a post-graduate diploma in business administration. As a result, I enrolled in an IBM 'Applied Data Science with Python' course via Coursera. My capstone project aimed to boost intracontinental tourism among young adults in Africa by providing them with more information about African cities and their venues (tourist attractions). The analysis was done using Python. Afterwards, I shared my code, wrote a report, and created a PowerPoint presentation to market my idea.

Two weeks into the IBM course, I also began a robotic process automation (RPA) project at Nielsen Sport South Africa, where I was interning. The program came to be called PR Bot. It recognized the presence of keywords on a website and marked them as present or not present on a spread sheet. I wrote the entire backend, tested it, and created a simple user-interface, which gave me a taste of event-driven and object-oriented programming. I then presented the program to the company and created a video presentation/demonstration of it. They said they would consider buying PR Bot if I could get it to recognize images, specifically brand logos. I did some research and found out that this was an application of cognitive automation (CA), which required the use of ML in the form of deep learning algorithms. Upon further research, I decided that CA is where I want to go in my career because it is the evolution of RPA, which I enjoy. However, I would need further education. This led me to ALIGN.

I also believe CA could make society more human and more humane. More human because it will force us to develop competencies which are more socially oriented, as those cannot be easily automated. For example, MIT professor Deb Roy has identified jobs that tap into social drives such as compassion, justice, and solidarity, as being the least likely to be affected by technological progress (McAfee & Brynjolfsson, 2017, p. 122). More humane because data-driven approaches can yield better decisions where people's lives are concerned. For example, a study by "economists Ozkan Eren and Naci Mocan found that in one US state," certain judges "handed down significantly harsher sentences immediately after their alma mater experienced an unexpected loss in a football game, and that these sentences were 'asymmetrically borne by black defendants.'" Unlike humans, machines are not susceptible to sways of emotion that can skew their judgement (McAfee & Brynjolfsson, 2017, p. 40). Although we have to be weary of incorporating our own biases into them.

While I do not have a 3.0, I graduated UNC with a 2.871 that was on the rise. I may have had some difficulty in my first two years of study, but I finished strong. I also recently graduated from arguably the best business school in Africa (The Gordon Institute of business Science (GIBS)) with a GPA above 3.0. Where I obtained high marks in analytical courses such as Financial Accounting and Micro-Economics. Receiving the Top Student award for the latter.

In summary, my motivations for studying computer science stem from hands-on coding experience, and my convictions about how ML can improve society. I would also relish the opportunity to study under professor Danyluk, due to her research focus on ML. Therefore, I hope Northeastern University will be my guide on this journey.

References

McAfee, A., & Brynjolfsson, E. (2017). *Machine, platform, crowd: Harnessing our digital future*. New York: W.W. Norton & Company.