**Statement of Purpose**

Sports have fascinated me since I was a child, especially Major League Baseball. I used to wake up secretly at 2:00 a.m. just to watch the ball games and support New York Yankees. Sports also played an important role in my early life. I was selected to join the table tennis varsity team in elementary school; I joined the basketball team in junior high; and I participated on the baseball team in senior high. To me, sports represent the spirit of perseverance and teamwork. These values are deeply rooted in me and have made me into someone who never gives up and who cherishes teammates. As a result, I am always dreaming of working in the sports industry. However, because sports are not prevalent in Taiwan and thus I would have limited career options, I did not work in the sports industry after graduation. Instead, I utilized the data analysis skills that I developed while earning my Chemical major. Some of the courses I took included Calculus, Nuclear Magnetic Resonance (NMR), and Matlab. After graduation, I joined a tech company as a customer analyst.

By chance, I read a report about a sports analyst who shared about how he supported the development of sports athletes and teams. With thorough performance analyses, athletes are able to break through their individual resistances and draft customized training plans to effectively enhance their training efficiency. Moreover, the Golden State Warriors won the games by analyzing data and developing the best line-up strategies in different scenarios. On the business side of sports, the Minnesota Twins developed its pricing system through leveraging data analysis that maximizes the team’s profit. To me, reading that report was an enlightening moment. I realized then that sports analysts could be game-changing assets to teams and athletes. Therefore, I determined that I would also contribute to my beloved industry as a sports analyst.

During my first job at Snapask, which is an app that enhance students’ learning quality, I demonstrated my skills in data analysis using Structured Query Language(SQL). I worked with the data team on several business intelligence projects that help the team optimize user experiences. To gain more practical skills in data analysis in business perspectives, I also joined T-Star, one of the largest Taiwanese telecom companies, as a business analyst. At T-Star, I analyzed daily operational data using Excel and forecasted sales performance through regression analysis, using promotional events and new product launches as factors. To acquire new users, I also proposed two new products after analyzing millions of records of user data. The new products successfully grew the number of users by 10% and even replaced our previous products as long-term products. Knowing that big data analysis requires various tools and statistical models, I also familiarized myself with Python and Tableau and registered for a one-year statistic class at National Taipei University. Later, I joined Foodpanda, the largest food delivery platform in Taiwan, as a business intelligence analyst. While there, I acquired skills in data warehouse management and data visualization by monitoring data trends and structures, importing data to Tableau, and creating dashboards for the CEO and managers to use and make business decisions. Additionally, I developed a risk management project using Python to monitor Foodpanda’s riders’ cash balance and extended the delivery area by analyzing the positive relationships between delivery range and order income.

Though I have demonstrated my skills in big data analysis and visualization through my work experience, I would also like to equip myself in the fundamental knowledge and skills of data science. Additionally, North America is the world’s leader in sports analytics. Many US sports team have open positions for sports analysts and many startups specializing in sports analytics are emerging in North America. An MS in Data Analytics Engineering provides exactly what I need to reach my professional goals. Furthermore, with Northeastern University’s comprehensive course offering—ranging from fundamental skills in collecting, storing, and analyzing data to electives from diverse disciplines—I plan to choose data science related courses to gain practical skills in modeling and machine learning. Moreover, your CO-OP program empowers students to gain practical experience that prepares students to excel in their future careers. Finally, the location is also attractive to me. Seattle has multiple sports teams and numerous tech companies, which makes this city the best choice for taking the next step in becoming a sports analyst.

Based on my personal observation, how to interpret data as business insights is the main challenge for data scientists. Compared with students from engineering backgrounds, I have two and a half years of professional experience in business, including operations, finance, and marketing. I know my business background will contribute to the CO-OP program and enable me to offer better solutions for cooperated companies. My hands-on experience in business analytics will also contribute greatly to class discussions, making our group work more feasible in the real-world. An MS in Data Analytics Engineering at Northeastern University is the dream program for me to fulfill my aspirations; I am ready for all the challenges that Northeastern University will offer me and all the challenges waiting for me beyond university.