

## Essay

Ever since my childhood, I have been a curious and eager child. Mathematics has been always my favourite subject at school and even when I started my first bachelor in Vietnam. However, I did not really recognize what I could actually do with mathematics. Because Vietnam is not so strong at teaching students how to apply their knowledge in praxis. Since I moved to Germany and had a chance to start my second bachelor in statistics, I started to build my interest in data mining, data analyse and data models. Now with each passing year, my interest has grown manifolds. I have spent hours to do research about my interest and found out that data science combines them all. The multi-disciplinary field of data science combines computer science with probability, statistics, analysis and management skills. Data science is also the answer to the most complex business and practical questions. I believe that data science is the future of Artificial intelligence and it is beneficial to learn about it more to cater to my interests. I hope to use the knowledge I will gain from my masters' degree to perform meaningful analysis of large sets of data.

In order to gain exposure to work on large datasets, I am currently working as intern at Munich Re Group. As a part of Non-Life Analytics Platform, I had a chance to step a step into data science career. The platform is the new home for data analytics solutions addressing the business needs of clients. It combines monitoring, visualization and machine learning capabilities in a powerful way and the implemented solutions cover major parts of the value chain of primary insurance business: from sales to claims, actuarial and underwriting analytics. My projects made extensive use of latest machine learning and statistical methods, e.g. R, Python, SQL and Power BI. During my internship I have been learning a lot about these programming languages and have built various types of data models such as claim cockpit, churn prediction, cross-selling, customer life time value to determine the preferences of potential consumers. Moreover I am now creating and developing a Pybox package, which can semi-automatically estimate the expected losses from the analytical base tables in our Azure Cloud database.

With such experiences in implementing data models, I now wish to leverage my knowledge to learn everything I can in the field of data science as I believe there is still a long way to go for me. I believe that curiosity and eagerness to learn can take you places and that Master of Data Science at LMU will help me significantly advance my knowledge in this domain. This masters' program will thus be a step towards achieving my dreams. The core courses are essential for my career growth as a data scientist. They will train me in different methods of statistical analysis, and programming knowledge needed to continue with my goal to provide more data insights for companies. LMU Statistics has been my dream institute to pursue this course as I wish to take the benefits of the expert knowledge provided by the skilled faculty of the university.

Through this degree, I aim to enhance my knowledge and expertise in programming, statistical and computational methods for collecting, managing, and analysing large and complex data sets and how to extract knowledge and information from these data sets. After completing my MSc, I wish to get into the field of Insurance/Reinsurance analytics as I believe that the insurance industry will be subjected to change and growth with technological advancement. The practical knowledge will give me the technical expertise to pursue my career as a data scientist.