Personal Statement:

The internet has become an indispensable part of everyday life, from social media to official documents. With the blessing of convenient information technology, comes the curse of information leak. China has witnessed a drastic growth in online users, which creates a higher demand for talents in information safety. As someone majoring in this field, I was motivated to continue developing on this path. Not only do I consider information safety a booming industry, but I also truly recognize its significance. Being a victim of information theft once, I am still anxious about how easy to piece together a clear user profile for those with criminal intentions. It sometimes seems that from basics including gender, appearance, and address to something more personal, such as preference and social connection, every aspect of a person is accessible online. My later experience in the project of online privacy in the school lab allows me to further understand how urgent it has become to protect the information safety of online users.

However, this experience also motivated me to explore the possibility of information security. Learning in Shanghai Jiao Tong University, one of the elite institutes in China, I was fortunate to access many projects and events that equipped me with knowledge of both leading theory and practices in the real world. Information security has great value to the modern business with computers and the internet being irreplaceable elements in business development. I was especially interested in encryption and flow, and more importantly its value in the industrial practice. I was thus determined to expand my education in the broader sense of information technology by pursuing a master’s degree.

As challenging as a postgraduate degree may seem, I am confident in my academic ability. I was an active student in a range of volunteer activities and social practices. For instance, as I mentioned above, I joined Cryptographic Analysis and Big Data Security Lab at our university and working under respected academic figures truly sparked my interest in how information technology benefits the function of society and business. Under their supervision, I joined the school project researching how to effectively detect the privacy leakage of social media users. Another experience that benefited me greatly was when I participated in the National College Student Information Security Contest with the project *Tracking and Detection System for Terrorists in Disguise.*The main aim of this system is to identify and track terrorists that perform designated violent acts so that we could assist the security system in identifying terrorists and grasp their whereabouts and facilitate investigations and evidence collection. I worked closely with my team members to enhance the research structure, contributing ideas to the development of the system. This experience enabled me to examine my theoretical knowledge in practice, and I became aware of what my knowledge could contribute to society.

Unfortunately, I was not able to explore how I could make a positive contribution with my professional knowledge in other aspects related to computer technology. My undergraduate major focuses mainly on information security, artificial intelligence, and data analysis. In recent years, China has witnessed a rapid growth in high-tech enterprises, and there are a large number of companies of information technology entering my homeland. This has led to the increasing number of talents working in this field and evoked a strong sense of anxiety because I was concerned with my all-around development in this field.

One of my goals during my Master’s programme is to continue my development on my leadership; I was the leader in my previous projects for several competitions, and I enjoyed the environment where people worked together and inspired each other. This is, from my perspective, an important quality of a data scientist for any workplace, as companies nowadays rely heavily on the interpretation of data for business development and operation. Also, this would be a valuable opportunity to improve my programming and modeling ability, helping me move forward in my academic journey. In return, I believe I could contribute to the programme with my speciality developed in the field of information security, and I hope to bring a different approach and view to modern technological systems to my peers. I truly believe the programme, MSc in Industrial and Systems Engineering would allow me to continue as the marketable and valuable professional I aspire to be.

Open question (career outline and reason for choose this programme):

One of the paths I would take is competing to be a data scientist helping an organisation or a company maximise their operational efficiency. Meanwhile, I would like to evaluate my research skills, and continuing in academia as a person who researches and innovate is indeed another passion of mine. Therefore, this programme, which allows me to explore obtain broad-based and leading-edge skills in data analytical tools and operational expertise, would help me to identify my career goal outside the realm of information technology with a comprehensive framework of knowledge.

Therefore, I would be thrilled to receive admission from NUS. I look forward to the lectures, seminars, and masterclasses from visiting practitioners, and respected academic figures at your university. This would be a precious opportunity to expand my understanding of data analytics, optimization, system engineering, decision making. I am particularly interested in course including Operations Research for Decision Making, and Data Analytics for Industrial Engineering and Decision Analysis, which would surely help me construct a comprehensive framework of knowledge on data-based decision making. I am excited to cultivate my skills and knowledge in such an open, critical and multicultural environment.