PERSONAL STATEMENT

Dear Haifa University Statistics Admissions Committee,

My name is Chen Caiyan, and I graduated from the Material Science and Engineering program at Shenzhen University. I aspire to join your International Master's program in Statistics to broaden my data analysis skills and lay a solid foundation for my future career.

My interest in statistics was sparked during the COVID-19 pandemic, which has lasted years and reshaped people's vision of things, including my own. Previously, I only considered statistics as a mathematical discipline only is regarding numbers and charts and barely saw its applications. In the period from 2020 to 2023, I witnessed how the Chinese government controlled the epidemic situation and formulated relevant policies through statistics and big data technology. Statistical knowledge and tools can help monitor and analyze epidemic dynamic data, predict the epidemic trends and key time nodes, evaluate treatment effects, optimize the distribution of medical staff, etc. The efficient and scientific data processing processes done by statistics tremendously amazed and intrigued me, which let me realize that statistics is a bridge connecting data with reality and problem-solving. Therefore, I aspire to focus on this fascinating and pragmatic domain in the pursuit of my Master's degree.

Reflecting on my previous experience, I believe my undergraduate program in material science and engineering has provided me with a unique angle and a solid mathematical foundation. Specifically, I calculated the heat change of an object through integral calculation and then derived the heat capacity in the thermodynamic research. I used calculus to process stress-strain curves and then obtained the modulus and stiffness of the material in the material mechanics analysis. When I was studying crystal structures, linear algebra helped me understand and calculate the the symmetry and displacement of crystals. Besides, I applied diffusion equations to describe how the concentration of substances in materials changes over time and space and learned how to use differential equation models to describe the relationship between the rate and concentration changes of chemical reactions as well. These mathematical tools are not only crucial in materials science but also indispensable foundations in statistical research. I am confident that my academic background will support me to fit into and perform well in my proposed postgraduate studies. Also my academic achievements, including the Mitsubishi Corporation Scholarship, National Inspirational Scholarship, and Academic Excellence Award, attest to my strong academic capabilities.

Upon my graduation from college, I started my employment at Valeo Automotive Internal Control (Shenzhen) Co., Ltd as an assistant. My daily tasks include arranging business trips for my boss, organizing large and small events, organizing daily meetings, and managing a system that calculates the working hours of more than 1000 employees. All these jobs require me to deal with plenty of data every day, so I have become proficient

in dealing with data using the functions of Excel, such as Transpose, Filter, Lookup, Vlookup, and Pivotable. Since I became aware of the magic power exerted by Statistics, my idea of processing data with statistical tools took shape.

After I thoroughly understood M.Sc. Program in Statistics at the University of Haifa, I am highly attracted by the world-class teaching faculty that is composed of experts and professors in the field of statistics. Furthermore, I find the structure of the International Master's program to be exceptionally well-designed, offering a progressive learning path for students with my academic background. From introductory courses in probability theory and statistical models in data science to advanced courses in deep learning and high-dimensional statistics, each step is aligned with the cutting edge of current statistical advancements, ensuring that students can gradually master the most advanced data analysis skills on a solid theoretical foundation.

After completing this course, I will pursue a PhD and plan to join a large financial institution after graduation, where I can make full use of my advanced statistics knowledge to gather, interpret, and deliver insights to our business decision-makers or clients. Facing increasing competition, regulatory constraints, and customer needs, financial institutions nowadays are seeking new ways to leverage technology to gain efficiency. Correspondingly, there exist numerous challenges such as the collection of unstructured data differing greatly in volume, variety, and velocity, the biased statistical analysis leading to misleading conclusions, and the lack of long-term predictive capability. As such, I aspire to address these challenges with my technical competency and business vision developed at your university.