To whom it may concern,

Re: Zimeng (Brandon) Ming

I am writing this letter as a reference for a co-op internship student of mine, Zimeng (Brandon) Ming in applying to your prestigious university. I am a software engineer and technical manager at China Construction Bank Fintech Technology Ltd (CCB Fintech Technology) in Wuhan, China. Prior to coming to CCB Fintech Technology, I obtained a master's degree in computer science from The University of Wuhan. China Construction Bank Fintech Technology Ltd is a wholly-owned subsidiary of China Construction Bank. It inherits the 30-year accumulation of scientific research strength of China Construction Bank. I have work for this company since July 2012 and I am taking charge of financial system development and design. In summer 2019, Brandon joined my team as a data science intern student for 3 months and I appreciated his hardworking and admire his amazing talent that presents during the work. We have maintained a good relationship after he back to the university and I have been involved with him in his recent research and projects continuing to the present.

Brandon is very involved in data science research and has shown excellent talent in analysis and visualization ability. His project on analysis about the 2020 US presidential election is very impressive. The methods he used for data collection, data cleaning, and analysis are useful and efficient. The sentiment analysis he did is reasonable, and the word cloud helps other researchers find the keywords clearly. Another project on tracking the data about COVID-19 with Tableau makes the people see how many cases change per day. In addition, the most attractive project he did is the prediction of the unemployment rate of Canada. In this project, he uses lots of statistics and data mining methods to analyze the unemployment rate of Canada, which is useful to solve real-life problems. Those projects reflect his solid knowledge of data science and critical ability on solving the problems.

Brandon is a dedicated student and has worked hard during his time at CCB FinTech Technology and gained the recognized by the team member include me. He participated in analyzing the fraud transaction data and the goal for this project is to find the relationship between variables of fraud transactions. He had a solid knowledge of using Python and SQL language to complete the task that assigned by the team leader and made a presentation about his research at the end of the term. His findings are useful and successful used in the current system. He also helped with building a graph database via Neo4j and visualizing the relationship for the fraud transactions. Also, he produced a user manual video about our system to express for the customer how to use our anti-fraud system. The entire job is particularly challenging as the problems are new and hard. Furthermore, Brandon was able to achieve a high preperformance on solving the problem and maintain patient with those hard questions. In the meantime, Brandon always took the time to learn the new objectives and collaborated with his teammates to produce excellent work and presentations. His work made an unbelievable impression on either client or CCB managers. Brandon is a highly intelligent and competent student who excels in many areas that demonstrate his commitment to improvement and

achieving success in the future. As the University of British Columbia is renowned for its Master of Data Science program, I believe this is an ideal place for Brandon to solidify his abilities and cement his knowledge of Data Science.

For the above reasons, I am confident that Brandon will make an excellent addition to your graduate program, and I wholeheartedly support him for admission to your program. Thank you for your time and attention in reading my endorsement, and please of not hesitate to contact me if any further information is required.

Sincerely,

Yongbo Liu

Technical Manager, M.Sc.

China Construction Bank Fintech Technology

Yongbo Liu

Liuyongbo.wh@ccbft.com