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Admissions Committee, Master of Management Analytics Program

Smith School of Business, Queen's University 200 Front St W #3020, Toronto, ON M5V 3K2 Canada

Dear Sir / Madam,

Having gone through the course curriculum and other aspects of your prestigious Master of Management Analytics program in detail, I found a great match between what it offers and my interests in using analytics to shape business decisions.

I had obtained a bachelor's degree 12 years ago from Tsinghua University, a Master of Science from University of Hong Kong 9 years ago, worked 12 years in the investment and financing of commercial real estate and had been a CFA charterholder since 2012. I had also devoted a huge chunk of my spare time learning statistical theory and tools, and I want to focus on analytics in my future professional development, that is why I am keen to join your well-balanced program.

My previous education and record of self-learning corresponds well with your program's principal of accompanying formal class learning with Udemy online courses for basic technical know-how.

Although it was more than a decade ago, but I still want to highlight two facts of my undergraduate studies. I was recommended to join Tsinghua University, the top school in China, after exhibiting exceptional talents in national competition of physics, mathematics and programming. I obtained full marks on subjects like linear algebra and calculus, not only because I studied hard like many of my peers but also because I was enchanted by the simple beauty of mathematics, and what deep insights a simple change of perspective could often yield.

Since graduation, inspired first by the statistics 110 online course from Joe Blitzstein of Harvard and the Python for Data Analysis book by Wes McKinney, then the joy of Tidyverse promoted by Hadley, I set out to enrich myself in the field of data analytics and use that knowledge in my job. These leads me to prefer a Bayesian approach because it is easier to persuade people outside of the statistical community with it. To that end, I had studied alongside Bayesian Methods for Hackers by Cameron Davidson-Pilon and I found the book and lecture by Richard McElreath on Statistical Rethinking immensely fun and helpful.

The downside of all these self-paced learning is that it lacks organization. I had identified 3 core components in a successful data analysis projects: data collection, inference / prediction and presentation / visualization. Left to myself, I was drawn too much into inference and prediction, I believe your well-balanced program can prepare me for the full game.

My former employer had sponsored me to a two-year program in the University of Hong Kong that focuses on real estate investment and financing. While pursuing this part-time degree I was also in the midst of an IPO process of my employer as well as passing my level 3 CFA exam. This period of time not only provided me with a body of knowledge from the curriculum of CFA institute and University of Hong Kong, but also perseverance under pressure and time management skills.

My professional experience also revealed to me the importance of analytics. By being analytical, I was able to stand out from my peers and save cost and time for my employers. Since I adopted a more managerial role, I am more acutely concerned of making analytics part of the key business activities, and I believe your program can provide me the soft skills to achieve this goal.

Among the selected few from over 30,000 applicants, I joined the management trainee program by Swire back in 2007, participated in its listing, disposal of major commercial property (HKD18.8 bn, world's 3rd largest in history), graduated the trainee program by working directly under the chief executive. I joined my current employer back in 2014 as Vice President and oversees cross-border acquisition of property portfolio worth GBP73.5 million, refinancing of assets over USD1.2 billion in value.

Although I am a native speaker of Mandarin, working in Hong Kong back in 2007 felt like in a foreign country, because it is predominately Cantonese. Relying on my analytical skills accumulated as an engineering student, I was able to impress senior management. They broke me out of the usual management trainee program, assigned me to work in the core team of preparing for listing of the company, disposal of a commercial property and I ended up working very closely with the Chief Executive of the company. I conducted financial modeling and sharpened my professional judgement by learning firsthand from the best.

In my current capacity advising the board of directors of a listed company since 2014, I think the below projects related to data analytics and result of my baby steps of self-education would be worth mentioning:

- Time series analysis for the timing to conduct share placement / buyback.
 - I used financial modeling to forecast the future dividends of the company

- Leveraged Prophet package (a Stan model underneath) for time series forecasting
- Used Bokeh for visualization of the uncertainty
- So far I had been able to convince board to place shares worth HKD 373 million
- 2) Since a tax reform in China resulted in disruptive database change, I wrote a python script:
 - Implemented the commercial logic with Pandas
 - Avoided manual conversion of the database
 - Cut down the monthly reporting time from several hours of error-prone manual work to within several minutes
- 3) Visualization of 84 UK properties with their valuation and investment yield
 - With RMarkdown Flexdashboard and Leaflet
 - This would serve as blue print for possible disposal
- 4) Visualization of lease expiry profile
 - Using Python and Bokeh for financial report and operation planning

So far I did this all by my own, as these projects were relatively small and I do not yet possess the ability to direct the analysts under my purview who had less data and programming literacy to help me with these projects.

I have found as I progress though the corporate ladder, to my dismay, the board of directors had relied on heuristics on many of the important business decisions. However, I don't blame the directors, because, in my humble opinion, the current state of data collection yield little analytical power, and there lacks clear communication of the power of these analysis.

If I have the honor to join your MMA program, I could build my ability to organize analytic projects and persuade decision makers through an iterative process of identifying business opportunities and addressing possible concerns. More importantly, I want to be able to make data and its analysis part of the key activities of commercial real estate investment and financing, by building teams and collecting business data.

That is also why I deeply appreciate the MMA program's use of corporate data sets, and applied research projects with Scotiabank Centre for Customer Analytics. As someone who is slightly older for a typical grad student, I noted that the profiles of the class showed an average age of 32 with a range from 22 to 52 that would fit me perfectly.

In the hope that I will get admission, I have enclosed my transcripts and references with this letter. If you need any other documents or information, please feel free to contact me at (852) 6794-1690.

Thank you for your time and consideration.

Paul Yuchao Dong