Application Letter

Dear Professors,

I hope this letter finds you well. I am Peiran Li, a third-year Accounting PhD student at Columbia Business School, under the mentorship of Professor Shiva Rajgopal. I am writing this letter as part of my application to your NBER Digital Economics and AI Tutorial. My motivations are as follows.

Over the past two years of doctoral coursework, I have taken a series of classes highly relevant to Digital Economics and AI. This semester, I am enrolled in Professor Laura Veldkamp's Information in Financial Markets course, and she kindly shared the link to apply for your conference. This summer, I spent a week in New Haven attending the Financial Machine Learning summer school organized by Professor Bryan Kelly and Professor Dacheng Xiu. Previously, I completed PhD Empirical Asset Pricing courses with Professors Geert Bekaert and Simon Oh, as well as a PhD Big Data in Finance course taught by faculty from Columbia's Finance Division. I also earned an A in the CBS Operations PhD course Generative AI: Technical and Social. Earlier, as an undergraduate at Tsinghua University in Beijing, I received systematic AI/ML training, taking courses such as Data Structures and Algorithms, Fundamentals of Machine Learning, Introduction to Artificial Intelligence, and Data Mining. Since beginning my doctoral studies, I have continued to engage actively with cutting-edge technologies and pursue related projects.

I have two fields of research interest, AI in Accounting & Finance and International Corporate Finance. Specific to the AI context, I very much want to explore what the sensible accounting rules for documenting codes and data would be in order for the classic valuation models to work in the current era. This is a crucial question, as the current set of accounting rules was created before the information technology revolution occurred, yet codes and data are arguably the most important assets of leading tech companies in Silicon Valley. Under the current system, internally generated properties such as codes and data cannot be reflected in financial statements, as there are no transactions related to them. The standard EV/EBITDA, P/E, and P/B valuation models do not work very well for tech-heavy companies. While I fully understand that proposing a systematic and detailed set of new rules is far beyond my capacity, I do firmly believe that early attempts in this area would be meaningful.

At present, I have two ongoing projects and may start a third soon. The first is an NLP project on AI in Accounting & Finance, coauthored with Professors Lauren Cohen and Quoc Nguyen. We aim to analyze the analysts' language patterns. The second is an international corporate finance project on the determinants and costs of corporate foreign debt issuance in tax havens, coauthored with my advisor, Professor Shiva Rajgopal.

Regarding the members of thesis committee, I have not yet reached a decision as I just started my third year. The committee chair will, of course, be my advisor Professor Shiva Rajgopal, and Professor Lauren Cohen will definitely be a committee member. But I have not yet decided which other faculty members to approach.

If any recommendation letter is needed, please let me know and I will reach out to my referees. I very much desire to attend this conference and highly cherish this valuable opportunity to learn from the leading scholars. Very much looking forward to hearing from you.

All the very best,

Peiran Li

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