Boyuan Li

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I am currently pursuing a PhD in Finance at the University of Florida. I am in my fifth year of the program and expect to graduate in Spring 2026. As part of my graduate study, I have taken graduate-level courses in finance, economics, and machine learning. My research interests include firms' adoption of artificial intelligence and engagement in corporate social responsibility. I would appreciate the opportunity to participate in the Digital Economics and AI Tutorial and believe that I will benefit from it tremendously, if selected.

My dissertation, entitled "AI Washing," is focusing on the burgeoning phenomenon that companies exaggerate or make false claims about their AI adoption, as investors and stakeholders increasingly value AI capabilities. Recent anecdotal evidence suggests that the Securities and Exchange Commission (SEC) is scrutinizing firms' claims about AI usage, highlighting the regulatory importance of this issue. Additionally, AI washing can lead to misallocation of capital, as funds flow to companies not actually investing in AI technology, rather than to those genuinely developing it. Such growing concerns underscore the need for a systematic investigation into AI washing behavior, its prevalence, and its implications for financial markets. In my preliminary findings, I have applied Natural Language Processing (NLP) techniques to document an increasing trend of AI discussions by firms. I plan to measure firms' AI investment by analyzing employee data and construct the AI washing measure as the difference between each firm's "talk" and "walk." I am honored to be working on my dissertation under the supervision of my committee members – professors Joel Houston, Alejandro Lopez-Lira, and Baolian Wang.

In one of my co-authored research projects, entitled "One Hundred and Thirty Years of Corporate Responsibility," my co-authors (Joel Houston and Sehoon Kim) and I apply NLP techniques to gain insights into historical public attitudes related to societal and environmental concerns in the business context. To construct a consistent measure of these shifting attitudes, we create dynamic word embeddings using roughly 130 years of news stories from the *Wall Street*

Journal and the *New York Times.* This approach enables us to illustrate very noteworthy shifts and cycles in the pressures that businesses face from various stakeholders. Building upon our created indices, we are also able to delve into a number of interesting questions. Among these questions are how shifts in these indices affect the cross-sectional distribution of stock returns and the determinants of corporate investment. We find that positive exposure to such public attention is associated with lower future stock returns. As of corporate investment, heightened environmental and social concerns reduce the level of corporate investments and investment efficiency in the short-run (i.e., 1-2 years out), but ultimately improve both the level and efficiency in the long-run (i.e., up to 10 years out). These findings indicate that markets are unable to fully price the long-term real effects of the demands for corporate responsibility.

In another project of mine, currently entitled "Artificial Intelligence, Inventory Automation, and Firm Performance," my co-authors (Shuang Chen, Min Fang, and Baolian Wang) and I explore how firms can harness AI to better predict and manage inventory, ultimately improving operational efficiency. While some of the previous research has highlighted the substitutability of AI and human labor, we believe that their complementary use can unlock significant efficiency gains. This synergy between AI and human labor represents a promising pathway for firms to enhance their operational efficiency and overall performance.

I have worked on another project, entitled “The Emerging Greenium,” with Baolian Wang and Jiawei Yu. In this project, we find that investors are willing to pay a green premium to invest in municipal bonds that fund environmentally friendly projects. Such greenium has emerged only after 2018 and interestingly, it is more significant in democratic counties and when greenwashing concern is mitigated.