

Academic Seminar

Machine Readership and Financial Reporting

In the age of Artificial Intelligence (AI), most analysis on corporate financial statements are conducted by machine. We explore the disciplinary effect of such technology on firms' financial misstatements. Firms respond to the increased machine readership by reducing financial misreporting that are sensitive to machine detection. As a falsification test, we find no evidence that machine readership is correlated to misreporting patterns that can be detected by traditional methods. This disciplinary effect is stronger among firms with more complex financial statements, more pressure from investors, and higher costs of earnings management.

Sean Cao, Ph.D.

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Dr. Cao is an associate professor of AI, FinTech, and sustainability (with tenure) in the Robert H. Smith School of Business at the University of Maryland. He is also an affiliated professor at Harvard Business School (D³ Institute). Dr. Cao's research has been featured in the *Financial Times*, *CNBC*, *Bloomberg*, *The Guardian*, and *Quartz*. To date, Dr. Cao has given over 100 invited research talks at major research universities. Dr. Cao also serves as a guest associate editor at *Management Science*. In 2020 and 2022, Dr. Cao co-chaired conferences with the *Review of Financial Studies* (dual submission) on Fintech and Machine Learning. (See more at <https://sites.google.com/view/seancao/home>). Dr. Cao is

deeply committed to helping business communities through his research. He has been honored with the award by the Deloitte Initiative for AI and Learning (DIAL), leading to develop AI solutions for social inclusion and climate change. For teaching, Dr. Cao has been invited externally by major research universities to teach short-term doctoral seminars on AI and Fintech in finance and accounting. He also runs a [tutorial blog site](#) (YouTube: Sean Cao_Fintech or Bilibili ID: Seancao_) that aims to help scholars outside of computer science smoothly adapt machine learning to finance and accounting research.



Date: **28 March 2023 (Tuesday)**

Time: **16:45 – 18:15**

Venue: **SEK107 / Zoom: <https://umd.zoom.us/my/seancao>**

Language: **English**



*** *All are Welcome* ***