ERIC B. ZHOU

U.S. Citizen

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Education

2023 - 2026 (Expected)	Boston University Questrom School of Business Doctoral Candidate in Information Systems Advisor: Dokyun "DK" Lee	Boston, MA
2021 - 2023	Washington University in St. Louis Olin Business School Master of Science in Business Administration	St. Louis, MO
2019 - 2021	Carnegie Mellon University Tepper School of Business Master of Business Administration Business Analytics Track Concentrations in Business Technologies and Operations Research	Pittsburgh, PA
2014 - 2018	Washington University in St. Louis Olin Business School Bachelor of Science in Business Administration Majors in Marketing and Finance	St. Louis, MO

Research

Submitted

1. Zhou, Eric; Lee, Dokyun. "Generative AI, Human Creativity, and Art." Available at SSRN. Under review

"Recent artificial intelligence (AI) tools have demonstrated their ability to produce outputs traditionally considered creative. One such system is text-to-image generative AI, which automates humans' execution to generate high-quality digital artworks. Utilizing a dataset of over 4 million artworks from more than 50,000 unique users, our research shows that text-to-image AI substantially enhances human creative productivity by 25% and increases the likelihood of receiving a favorite per view by a similar percentage. While peak artwork content novelty (focal objects and object relationships) increases over time, average content novelty declines, suggesting an expanding but inefficient creative space. Additionally, there is a consistent reduction in visual novelty (pixel-level stylistic elements). Importantly, AI-assisted artists who can produce more novel ideas, regardless of overall novelty prior to adoption, produce artworks that their peers evaluate more favorably. The results imply that ideation and likely filtering are necessary skills in the text-to-image process, thus giving rise to "generative synesthesia" - the harmonious blending of human senses and AI mechanics to discover new creative workflow."

Works in Progress

- 1. Lee, Dokyun; **Zhou**, **Eric**. New Generative Al Project! *Data preparation*.
- 2. **Zhou, Eric**; Lee, Dokyun. "Human Incumbents vs. Generative Entrants: Impact of Generative AI in Creative Labor Markets." *Data preparation*.
- 3. Zhou, Eric; Hui, Xiang; Lee, Dokyun. "Economic Value of Image-Based Seller Quality Signals."

 Workshop on Information Systems and Economics (WISE) 2022 Bast Student Paper Finalist

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"In online marketplaces, sellers can rely on alternative mechanisms to signal their quality when they lack rich transaction histories. Using scraped data on GPU sales from eBay, we find that certain image signals can substitute for reputation to increase conversion rates amongst sellers with less than 100% positive reputation,

and conditional on making a sale, can realize a 5% price premium on average. However, the effects are only significant for less reputable sellers."

Conference & Workshop Presentations

Oct. 2023	Zhou, Eric; Lee, Dokyun. "Generative AI, Human Creativity, and Art." INFORMS Annual Meeting at Phoenix, AZ
Oct. 2023	Zhou, Eric; Lee, Dokyun. "Generative AI, Human Creativity, and Art." INFORMS Workshop on Data Science at Phoenix, AZ
Sep. 2023	Zhou, Eric; Lee, Dokyun. "Generative AI, Human Creativity, and Art." Wharton Business and Generative AI Workshop at San Francisco, CA
Dec. 2022	Zhou, Eric; Hui, Xiang; Lee, Dokyun. "Economics of Image-Based Seller Quality Signals." Workshop on Information Systems and Economics (WISE) at Copenhagen, DK Best Student Paper Finalist
Aug. 2020	Lee, Dokyun; <u>Zhou, Eric</u> ; Mao, Chengfeng; Kane, Gerald. "Interpretable Machine Learning for Theory Building." MISQ Author Workshop, virtual

Teaching Experience

Spring 2023 DAT 500W: A/B Testing in Business

Heading Teaching Assistant

Taught by Xiang Hui and Christopher Mondy

Industry Experience

2021 - Present	Machine Learning Contractor Angel Flights West	Santa Monica, CA (Remote)
2018 - 2019	Market Research Analyst, Product Innovation Analytics Nielsen BASES	Wilton, CT

Skills

Python, PyTorch, LangChain, R, LaTeX, SQL, web scraping

Coursework

Fall 2020	Economining (PhD Seminar in Business Technologies)
Fall 2021	Microeconomics I Empirical Methods in Business: Part B (Advanced Econometrics) Doctoral Seminar in Marketing
Spring 2022	Microeconomics II Causal Inference Analytical Modeling in Marketing: Part A Empirical Methods in Structural Modeling

Empirical Methods in Business: Part A Fall 2022 Seminar in Strategy & Organization Experimental and Behavioral Research Methods: Part A Strategic Management of Innovation & Technology Spring 2023 Seminar in Strategy Independent Study in Strategy: Creativity Applied Machine Learning Fall 2023

Seminar in Generative AI and Causal Inference with Text

Awards

Oct. 2023	INFORMS Gold Student Scholarship
Sep. 2023	Questrom School of Business Doctoral Fellowship
Dec. 2022	WISE 2022 Best Student Paper Finalist
Aug. 2021	Olin Business School Doctoral Fellowship
Feb. 2019	Nielsen BASES Client Service Superstar Award