Junting Duan

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Employment

- **The University of Hong Kong** — Hong Kong
  Assistant Professor, Department of Innovation and Information Management — *Jul 2026 - present*
  Faculty of Business and Economics

Education

- **Stanford University** — Stanford, CA, USA
  Ph.D. in Management Science and Engineering — *Sep 2020 - Jun 2026*
  Advisor: Prof. Markus Pelger
- **Peking University** — Beijing, China
  B.S. in Mathematics and Applied Mathematics (Highest Honors) — *Sep 2016 - Jun 2020*

Research Interests

My research interests lie broadly in data-driven decision-making, focusing on developing advanced machine learning and statistical methods with rigorous theoretical foundations for applications in finance and causal inference.

Journal Publications & Working Papers

- **Inference with AI-Generated Covariates**
  Junting Duan*, Markus Pelger*
  Working Paper
  Conference Presentations: NBER Summer Institute Frontier Econometric Methods
- **Imputation-Powered Inference for Missing Covariates**
  Junting Duan*, Markus Pelger*
  Working Paper
  Seminar Presentations: Stanford University, the University of Hong Kong, the National University of Singapore, the Chinese University of Hong Kong, Peking University, Tsinghua University, Fudan University
  Conference Presentations: SoFiE Annual Conference, INFORMS Annual Meeting, the ABFR Doctoral Research Symposium, the World Online Seminar on ML in Finance
- **Automatic Doubly Robust Forests**
  Zhaomeng Chen*, **Junting Duan***, Victor Chernozhukov, Vasilis Syrgkanis
  Working Paper
  Seminar Presentations: Stanford University, Peking University
- **Learning Illiquid Asset Prices**
  Junting Duan*, Yang Fan*, Kay Giesecke*
  Working Paper
  Seminar Presentations: UC Berkeley
  Conference Presentations: Western Conference on Mathematical Finance, 2nd Quantitative Investment Symposium, Frontiers in Quantitative Finance Seminar, Workshop on Financial and Insurance Mathematics
- **Factor Analysis for Large Non-Stationary Panels with Endogenous Missingness and Applications to Causal Inference**
  Junting Duan*, Markus Pelger*, Ruoxuan Xiong*
  Management Science, Accepted
  Seminar Presentations: Stanford University, HKUST (GZ)
  Conference Presentations: NBER Forecasting & Empirical Methods, American Economic Association Annual Meeting, Causal Science 2023 Conference, NBER-NSF Time-Series Conference, INFORMS Annual Meeting, the International Conference on Econometrics and Statistics, the Annual Conference of the Society for Economic Measurement

- **Change-Point Testing for Risk Measures in Time Series**
  Lin Fan, **Junting Duan**, Peter Glynn, Markus Pelger
  Journal of Financial Econometrics, Accepted
  Conference Presentations: NBER-NSF Time-Series Conference

- **Target PCA: Transfer Learning Large Dimensional Panel Data**
  Junting Duan*, Markus Pelger*, Ruoxuan Xiong*
  Journal of Econometrics, 244(2): 105521, 2024
  Seminar Presentations: Stanford University, Rochester University, Oxford University
  Conference Presentations: NBER-NSF Time-Series Conference, California Econometrics Conference, SoFiE Annual Conference, North American Meeting of the Econometric Society

Professional Service

- **Journal Reviewer**:
  Journal of Econometrics, *Management Science*, *Operations Research*, *Quantitative Economics*
- **Conference Service**:
  Session Chair, INFORMS Annual Meeting, 2025
  Reviewer, The 4th ACM International Conference on AI in Finance, 2023

Honors & Awards

- Charles and Katherine Lin Graduate Fellowship, 2024-2025
- Stanford MS&E Course Assistant Award, 2024
- Jerome Kaseberg Doolan Graduate Fellowship, 2023-2024
- Charles and Katherine Lin Graduate Fellowship, 2022-2023
- Stanford School of Engineering Fellowship, 2020-2021
- Peking University School of Mathematical Sciences Highest Honors (Awarded to top students), 2020

Teaching

- MS&E 245A Investment Science (Prof. Markus Pelger)
  Teaching Assistant, Fall 2021-2025
- MS&E 221 Stochastic Modeling (Prof. Peter Glynn)
  Teaching Assistant, Spring 2024, 2025
- MS&E 211 Introduction to Optimization (Prof. Ashish Goel)
  Teaching Assistant, Winter 2022