December 22, 2025

Journal of Machine Learning Research

Dear Editors:

I am writing to submit my manuscript "Not All Factors Crowd Equally: A Game-Theoretic Model of Alpha Decay with Global Transfer and Risk Management" to the *Journal of Machine Learning Research*.

Our manuscript studies game-theoretic foundations of factor alpha decay, MMD-based domain adaptation for global market transfer, and crowding-weighted conformal prediction for tail risk management. This work is important because it provides the first mechanistic explanation of why factor returns decay heterogeneously, enables principled transfer of crowding insights across global markets, and offers distribution-free uncertainty quantification for portfolio risk management.

This paper is original work and has not been previously published in any conference proceedings or journal.

I suggest the following action editors and referees for our submission.

Action Editors:

- Aaditya Ramdas, Carnegie Mellon University (aramdas@cmu.edu)
- Arthur Gretton, University College London (arthur.gretton@ucl.ac.uk)
- Stefano Ermon, Stanford University (ermon@stanford.edu)
- Zico Kolter, Carnegie Mellon University (zkolter@cs.cmu.edu)
- Percy Liang, Stanford University (pliang@cs.stanford.edu)

Reviewers:

- Emmanuel Candès, Stanford University (candes@stanford.edu)
- Yaniv Romano, Technion (yromano@technion.ac.il)
- Krikamol Muandet, CISPA Helmholtz Center (krikamol@cispa.de)
- Bryan Kelly, Yale University (bryan.kelly@yale.edu)
- Dacheng Xiu, University of Chicago (dachengxiu@chicagobooth.edu)

Our submission has the following keywords: factor investing, alpha decay, crowding dynamics, game theory, equilibrium analysis, domain adaptation, transfer learning, conformal prediction, uncertainty quantification, portfolio risk management, factor crashes.

As the corresponding author, I confirm that I have no conflict of interest with the action editors and referees I suggest above.

Sincerely,

Chorok Lee (Korea Advanced Institute of Science and Technology)