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EDUCATION

HEC Montréal, Canada — 2021 – present
Ph.D. in Finance

Princeton University, USA — 2025 Spring
Visiting Ph.D. Scholar

Nanyang Technological University (NTU), Singapore — 2017 – 2019
M.Sc. in Finance

Shanghai University (SU), China — 2012 – 2016
B.A. in Finance

RESEARCH INTEREST

Asset Pricing, Derivatives, Macroeconomics News, 0DTE Options, Market Microstructure, High-Frequency Data

JOB MARKET PAPER

Pre-FOMC Uncertainty Accumulation: Evidence from 0DTE Options [SSRN]

Abstract: Using 0DTE SPX options, I show that the event uncertainty—the expected volatility of stock returns generated by the event—accumulates rather than resolves before scheduled FOMC announcements. The event uncertainty rises monotonically until 14:00 ET and largely collapses at the announcement time. Both the level and the intraday increments of event uncertainty strongly forecast realized volatility in any window after the announcement time, but not prior to it. The implied skewness is uniformly negative, varies little, and does not predict returns. Immediately after the listing of options expiring on FOMC days, the pre-announcement drift documented in the literature disappears, indicating that the drift reflected compensation for higher-order uncertainty. The same accumulation-and-release pattern appears around the FOMC Minutes and the closing auction. The 0DTE option market prices any regularly anticipated concentration of price discovery in the same accumulating fashion, whether macroeconomic or microstructural.

Presentations: AFA (2027, poster, scheduled), McGill University (scheduled), HEC Montréal, CIREQ Financial Econometrics Conference (2026, poster),CIREQ-HEC Women in Econometrics Conference (2026, poster)

WORKING PAPERS

The Factor Structure of 0DTE Option Returns, with Christian Dorion and Piotr Orłowski

Abstract: Zero-days-to-expiration (0DTE) options have become half of SPX trading volume. We ask which systematic risks their returns compensate and whether their prices are efficient. Six factors: three realized return moments and three variance-dynamics components, span 30-minute SPX option returns at maturities from 45 minutes up to 15 days and price 0DTEs jointly with longer-dated contracts. Warehousing gamma and absorbing jump-skewness exposure earn premiums; the variance-component premiums differ but sum to zero intraday. Remaining alpha concentrates in 0DTEs, yet a factor-neutral strategy becomes infeasible under minimal transaction costs. Option alphas fall as inventories build and, secondarily, intermediary balance sheet conditions tighten.

Presentations: AFA (2027, scheduled), Concordia University, Derivatives and Asset Pricing Conference (2026)*, Northwestern University*, 17th Annual SoFiE Conference (2025)*, Queen's University*, Western University*, FMA/Cboe on Derivatives and Volatility (2024)*, HEC Montréal*.*

WORK IN PROGRESS

It's Jump O'Clock: Clustered Liquidity Demand and Intraday Jumps, with Christian Dorion and Piotr Orłowski

DISCUSSIONS

"Culling the Factor Zoo" by Bakshi, G., Christensen, T., Crosby, J., and Gao, X. (*NFA 2026*)

TEACHING EXPERIENCE

Instructor

Investment (B.B.A.), HEC Montréal — 2025 Summer

(*Evaluation: 3.5/4.0*)

Teaching Assistant

Fixed Income Securities (M.Sc.), HEC Montréal — 2026

Derivatives (M.Sc.), HEC Montréal — 2023–2026

AWARDS AND HONORS

2027	AFA Ph.D. Student Travel Grant	AFA Annual Meeting
2025	Teaching Excellence Award	HEC Montréal
2025	PhD/Postdoc Travel Funding	Annual SoFiE Conference
2024	Research Scholarship in Derivative Instruments	TMX - Montréal Exchange
2023	Édouard-Montpetit–Manuvie Scholarship for Excellence (Ph.D.)	HEC Montréal
2019	Book Prize–Third Prize (M.Sc.)	NTU
2019	Dean's Honours List	NTU
2018	Dean's Honours List	NTU

ADDITIONAL INFORMATION

Software and Programming: Python, R, Mathematica, Stata, LaTeX

Languages: Mandarin(native), English(fluent), French(beginner)

REFERENCES

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*: presented by the coauthor.