

Kevin Webster

609-533-7108 | webster.x2007@gmail.com | [linkedin/kevin-t-webster](https://www.linkedin.com/in/kevin-t-webster)

BUY-SIDE QUANT OF THE YEAR 2024 AWARD | PROVEN LEADER RESEARCHING MODELS, BUILDING QUANTITATIVE PORTFOLIOS, DEPLOYING TRADING ALGORITHMS, AND MENTORING YOUNG TALENT.

TRADING AND QUANT EXPERIENCE

D.E. SHAW | QUANTITATIVE RESEARCHER

New York, NY | Nov 2023 – Present

CITADEL | GARDEN LEAVE

Chicago, IL | Oct 2021 – Oct 2023

CITADEL | QUANTITATIVE RESEARCHER

Chicago, IL | Feb 2016 – Oct 2021

- Designed, built, and deployed the Central Liquidity Book (CLB), a systematic quant portfolio executing all Fundamental Equities trades, massively reducing the firm's total transaction costs.
- Grew and mentored the CLB team from three to fifteen members, refining alpha and price impact models and aligning traders, researchers, and developers with the firm's strategic trading goals.
- Led the large-scale research infrastructure rebuild in kdb and Python, deploying high-performance computing (HPC) tools to a team of fifty, reducing model runtime by a factor hundred.

DEUTSCHE BANK | RESEARCH ASSOCIATE

New York, NY | May 2014 – Feb 2016

- Produced alpha models and back tests for buy-side clients as a part of Yin Luo's Quant Research team.

BNP PARIBAS | RESEARCH INTERN

London, UK | Apr 2010 – Aug 2010

- Researched and deployed a high-frequency trading algorithm for the Foreign Exchange market making team.

TEACHING EXPERIENCE

FORDHAM GABELLI SCHOOL OF BUSINESS | ADJUNCT PROFESSOR

New York, NY | Aug 2023 – Oct 2023

- Taught *M890, Market Impact Models* to fifteen students.

COLUMBIA UNIVERSITY | ADJUNCT ASSISTANT PROFESSOR

New York, NY | Jan 2023 – Oct 2023

- Taught *GR5440, Price Impact and Applications to Algorithmic Trading* to sixty students for the Mathematics of Finance MA (MAFN). Students built trading strategies on high-frequency tick data using kdb.

IMPERIAL COLLEGE | VISITING ASSISTANT PROFESSOR (READER)

London, UK | Aug 2022 – Oct 2023

- Authored the *Handbook of Price Impact Modeling*.
- Co-taught *Algorithmic and High Frequency Trading* to thirty students with Johannes Muhle-Karbe, head of Mathematical Finance. Students built trading strategies on real high-frequency data using Python.
- Involved in PhD supervision for two students and four academic research publications.

PRINCETON UNIVERSITY | VISITING LECTURER

Princeton, NJ | Jan 2016 - Jul 2016

- Taught *ORF 474, High-Frequency Markets: Models and Data Analysis* to forty students. Students built execution models on real trading data using R.

EDUCATION

Princeton University

Princeton, NJ | Sep 2010 - May 2014

PHD IN OPERATIONS RESEARCH AND FINANCIAL ENGINEERING

- Studied stochastic control problems and high-frequency statistics applied to price impact, market making, and mean-field games under Professor Rene Carmona. Published two papers.

Ecole Polytechnique

Palaiseau, France | Sep 2007 - May 2010

BACHELOR'S AND MASTER'S DEGREES IN MATHEMATICS AND APPLIED MATHEMATICS

SKILLS AND AWARDS

Honors and Awards: Risk's Quant of the Year 2024, IMO 2005, 3rd in French National Math Olympiads (Concours General).

Programming Languages: Kdb/q, Python, R, extensive experience with distributed and high-performance computing (HPC).

Soft Skills: Excels in writing, public speaking, mentoring, and managing projects, stakeholders across sizable, multidisciplinary teams.

SELECTED PUBLICATIONS

- HANDBOOK OF PRICE IMPACT MODELING** [↗](#) CRC PRESS, 2023
- STOCHASTIC LIQUIDITY AS A PROXY FOR NONLINEAR PRICE IMPACT** [↗](#) OPERATIONS RESEARCH, 2023
- GETTING MORE FOR LESS - BETTER A/B TESTING VIA CAUSAL REGULARIZATION** [↗](#) RISK, 2023
- THE COST OF MISSPECIFYING PRICE IMPACT** [↗](#) RISK (PREPRINT), 2023
- TRADING WITH CONCAVE PRICE IMPACT AND IMPACT DECAY - THEORY AND EVIDENCE** [↗](#) PREPRINT, 2023
- UNWINDING STOCHASTIC ORDER FLOW: WHEN TO WAREHOUSE TRADES** [↗](#) PREPRINT, 2023
- A LELAND MODEL FOR DELTA HEDGING IN CENTRAL RISK BOOKS** [↗](#) MATHEMATICAL FINANCE, 2023
- OPTIMAL BROKERAGE CONTRACTS IN ALMGREN-CHRISS MODEL WITH MULTIPLE CLIENTS** [↗](#) SIAM JOURNAL ON FINANCIAL MATHEMATICS, 2023
- THE SELF-FINANCING EQUATION IN LIMIT ORDER BOOK MARKETS** [↗](#) FINANCE AND STOCHASTICS, 2019
- INFORMATION AND INVENTORIES IN HIGH FREQUENCY TRADING** [↗](#) 2015 SWISS FINANCE INSTITUTE
- TRANSLATION INVARIANT MEAN FIELD GAMES WITH COMMON NOISE** [↗](#) 2015 ELECTRONIC COMMUNICATIONS IN PROBABILITIES
- HIGH FREQUENCY MARKET MAKING** [↗](#) 2012 OXFORD-PRINCETON WORKSHOP ON FINANCIAL MATHEMATICS AND STOCHASTIC ANALYSIS

SELECTED TALKS

- KEYNOTE SPEAKER AT THE ELECTRONIC TRADING & EXECUTION CONSULTING CONFERENCE** [↗](#) BANK OF AMERICA, 2023
- KXCON23| THE SCIENCE OF PRICE IMPACT MODELING** [↗](#) KX, 2023
- SQA TRADING DAY| WHAT IS THE P&L COST OF INCORRECTLY ESTIMATING YOUR PRICE IMPACT MODEL?** [↗](#) SOCIETY OF QUANTITATIVE ANALYST, 2023
- UNWINDING STOCHASTIC ORDERFLOW** [↗](#) COLUMBIA UNIVERSITY, MATHEMATICAL FINANCE SERIES, 2023
- CAUSAL BIASES IN TRADING** [↗](#) CARNEGIE MELLON UNIVERSITY, MSCF SPEAKER SERIES, 2023
- DISENTANGLING ALPHA FROM IMPACT USING CAUSAL MACHINE LEARNING** [↗](#) OXFORD UNIVERSITY, FRONTIERS IN QUANTITATIVE FINANCE SEMINAR, 2023
- CLOSED-FORM FORMULAS FOR TRADING WITH PRICE IMPACT** [↗](#) PRINCETON ORFE, FINANCIAL MATHEMATICS SEMINAR, 2022
- BETTER A/B TESTING VIA CAUSAL REGULARIZATION** [↗](#) NYU COURANT, MATHEMATICAL FINANCE SEMINAR, 2022
- THE MATHEMATICS OF CAUSAL INFERENCE WITH APPLICATIONS TO TRADING** [↗](#) IMPERIAL COLLEGE LONDON, FINANCIAL MATHEMATICS SEMINAR, 2022
- HOW PRICE IMPACT DISTORTS ACCOUNTING P&L** [↗](#) CORNELL, FINANCIAL ENGINEERING MANHATTAN SEMINAR, 2022
- REVISITING THE OBIZHAIEVA AND WANG MODEL** [↗](#) UNIVERSITY OF CHICAGO, MARKET MICROSTRUCTURE AND HIGH FREQUENCY DATA CONFERENCE, 2019