Professor, Co-director of the QFRM Programme
Assistant Dean (Education), Faculty of Science
Fellow, Centre for Promoting Science Education, Faculty of Science, Chinese University of Hong Kong

CURRICULUM VITAE

Phillip Yam

PERSONAL DATA

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EDUCATION

1) D.Phil. (2008) in Mathematical Institute of University of Oxford under the supervision of Wallis Professor, T. J. Lyons, FLSW, FRSE, FRS; former Director of Oxford-Man Institute of Quantitative Finance (2011 – 2015). Supported by a full scholarship offered by *Croucher Foundation, Hong Kong*.
2) MASt (2003, Math Tripos Part III) with Distinction and E. M. Burnett Prize, University of Cambridge. Supported by a full scholarship offered by *Croucher Foundation, Hong Kong*.
3) M.Phil.*(2001) & B.Sc. (Actuarial Sc) (1st class honors, 1999), University of Hong Kong. Dean's Honor Listings from 1997 to 1999. The advisor of my M.Phil. study is Professor Hailiang Yang, ASA, HonFIA, Editor-in-chief of *Insurance: Mathematics and Economics*.

* Nominated for the "Best M. Phil. Thesis award 2001", HKU.

PROFESSIONAL EXPERIENCE

1) Assistant Professor, Hong Kong Polytechnic University, Department of Applied Mathematics, Sept 2007 to June 2010
2) Co-Director of Interdisciplinary Major Program in *Quantitative Finance and Risk Management Science* and Professor (tenured since 2014 and promoted to Full Professor since 2020), Chinese University of Hong Kong, United College and Department of Statistics, July 2010 to present
3) Visiting Professor, Department of Statistics, Columbia University in the City of New York, New York, USA, Sept 2016 to Dec 2016.
4) Assistant Dean (Education), Faculty of Science, Chinese University of Hong Kong, August 2021 to present.
   Organized the "Women in Science" dialogue talk series, one among the first in Hong Kong, and built up a 2+2 dual degree joint program with School of Mathematics, University of Edinburgh.
5) Visiting Professor, Naveen Jindal School of Management, University of Texas at Dallas, Texas, USA, 2024 to 2026.
6) Distinguished Visiting Scholar, School of Risk and Actuarial Studies, University of New South Wales, Sydney, Australia, March 2025.

PROFESSIONAL SOCIETIES

1) Member of Society of Actuaries since June 1998.
2) Treasurer of Hong Kong Statistical Society (HKSS), 2019-2020. (http://www.hkss.org.hk/index.php/about-us/13-committee)
3) Croucher Scholar of Croucher Foundation for *Croucher Science Week* since 2017. (https://croucherscience.hk/en/scholars)

Recent event in HK Science Museum (Apr 2024) (https://croucherscienceweek.hk/events/air-and-force)

MAIN RESEARCH INTERESTS

1) Actuarial Science: Insurance and Reinsurance, Risk Management in Insurance and Ruin Theory
2) Applied Mathematics: Analysis and PDEs, Control Theory and Optimization
3) Mathematical Finance: Market Structure and Pricing, Portfolio Strategy and Risk Management
4) Probability Theory, Stochastic Analysis and Mean Field Theory
5) Statistical Theory and Applications: Asymptotic Theory, Data Analytics, Financial Statistics

LIST OF RESEARCH OUTPUTS OR CREATIVE WORKS

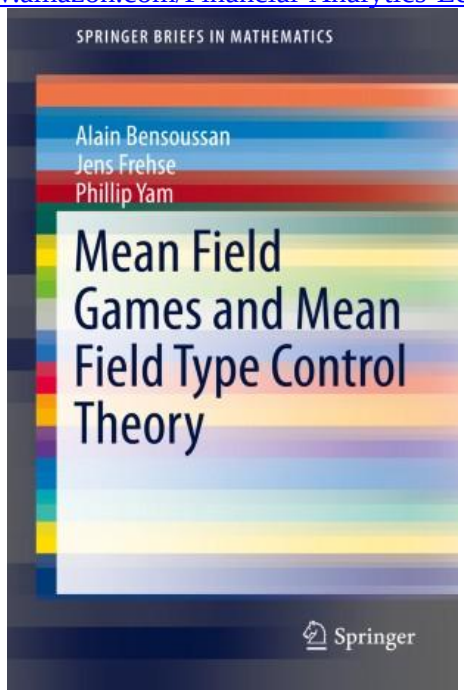
1. Research Impact

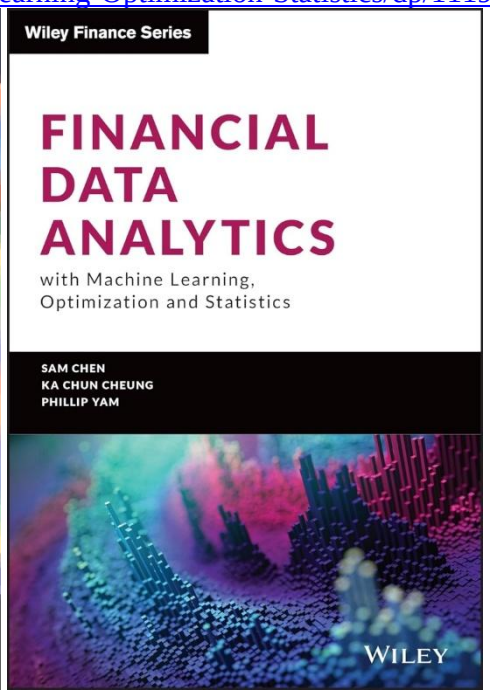
The impact case study with the title "*Real-life Applications of Some Novel Data Analytics Tools*" was classified as 4* in the Mock Research Assessment Exercise (RAE) 2023-24.

For the following research works, research effort is shared equally among all the authors. For almost all works, the authors are ordered in the alphabetical orders of their surnames.
(IF = impact factor, NC = number of citations)

2. Book Authored

1) Bensoussan, A., Frehse, J., and Yam, P. (2013). Mean Field Games and Mean Field Type Control Theory. New York: Springer. (NC = 931). (http://www.springer.com/us/book/9781461485070)
2) Chen, Y., Cheung, K. C., and Yam, P. (2024). Financial Data Analytics with Machine Learning, Optimization and Statistics. Wiley Finance Series, John Wiley & Sons. (https://www.amazon.com/Financial-Analytics-Learning-Optimization-Statistics/dp/1119863376)





3. Publications in Refereed Journals

Actuarial Science

Insurance and Reinsurance

1) Sung, K. C. J., Yam, S. C. P., Yung, S. P., and Zhou, J. H. (2011). Behavioral Optimal Insurance. **Insurance: Mathematics and Economics**, 49(3), 418-428. (IF(Clarivate 2023) = 1.9, NC = 50). https://doi.org/10.1016/j.insmatheco.2011.04.008

2) Cheung, K. C., Liu, F., and Yam, S. C. P. (2012). Average Value-at-Risk Minimizing Reinsurance under Wang's Premium Principle with Constraints. **ASTIN Bulletin**, 42(02), 575-600. (IF(Clarivate 2023) = 1.7, NC = 19). https://doi.org/10.2143/AST.42.2.2182809
3) Chen, P., and Yam, S. C. P. (2013). Optimal proportional reinsurance and investment with regime-switching for mean–variance insurers. **Insurance: Mathematics and Economics**, 53(3), 871-883. (IF(Clarivate 2023) = 1.9, NC = 43). https://doi.org/10.1016/j.insmatheco.2013.10.004
4) Cheung, K. C., Sung, K. C. J., and Yam, S. C. P. (2014). Risk-Minimizing Reinsurance Protection For Multivariate Risks. **Journal of Risk and Insurance**, 81(1), 219-236. (IF(Clarivate 2023) = 2.1, NC = 37). https://doi.org/10.1111/j.1539-6975.2012.01501.x
5) Cheung, K. C., Sung, K. C. J., Yam, S. C. P., and Yung, S. P. (2014). Optimal Reinsurance under General Law-invariant Risk Measures. **Scandinavian Actuarial Journal**, 2014(1), 72-91. (IF(Clarivate 2023) = 1.6, NC = 102). https://doi.org/10.1080/03461238.2011.636880
6) Cheung, K. C., Chong, W. F. A., and Yam, S. C. P. (2015). The Optimal Insurance under Disappointment Theories. **Insurance: Mathematics and Economics**, 64, 77-90. (IF(Clarivate 2023) = 1.9, NC = 34). https://doi.org/10.1016/j.insmatheco.2015.04.004
7) Siu, C. C., Yam, S. C. P., and Yang, H. (2015). Valuing Equity-Linked Death Benefits in a Regime-Switching Framework. **ASTIN Bulletin**, 45(02), 355-395. (IF(Clarivate 2023) = 1.7, NC = 40). https://doi.org/10.1017/asb.2014.32
8) Cheung, K. C., Chong, W. F. A., and Yam, S. C. P. (2015). Convex Ordering for Insurance Preferences. **Insurance: Mathematics and Economics**, 64, 409-416. (IF(Clarivate 2023) = 1.9, NC = 14). https://doi.org/10.1016/j.insmatheco.2015.06.005
9) Siu, C. C., Yam, S. C. P., Yang, H., and Zhao, H. (2017). A class of nonzero-sum investment and reinsurance games subject to systematic risks. **Scandinavian Actuarial Journal**, 8, 670-707. (IF(Clarivate 2023) = 1.6, NC = 26). https://doi.org/10.1080/03461238.2016.1228542
10) Cheung, K. C., Yam, S. C. P. and Zhang, Y. (2019). Risk-adjusted Bowley Reinsurance under Distorted Probabilities. **Insurance: Mathematics and Economics**, 8, 64-72. (IF(Clarivate 2023) = 1.9, NC = 34). https://doi.org/10.1016/j.insmatheco.2019.02.006
11) Cheung, K. C., Yam, S. C. P. and Yuen, F. L. K. (2019). Reinsurance Contract Design with Adverse Selection. **Scandinavian Actuarial Journal**, 9, 784-798. (IF(Clarivate 2023) = 1.6, NC = 9). https://doi.org/10.1080/03461238.2019.1616323
12) Cheung, K. C., Yam, S. C. P., Yuen, F. L. K. and Zhang, Y. (2020). Concave Distortion Risk Minimizing Reinsurance Design under Adverse Selection. **Insurance: Mathematics and Economics**, 91, 155-165. (IF(Clarivate 2023) = 1.9, NC = 8). https://doi.org/10.1016/j.insmatheco.2020.02.001
13) Chen Y., Cheung, K. C., Choi, H. M. C. and Yam, S. C. P. (2020). Evolutionary Credibility Risk Premium. **Insurance: Mathematics and Economics**, 93, 216-229. (IF(Clarivate 2023) = 1.9, NC = 5). https://doi.org/10.1016/j.insmatheco.2020.04.015
14) Cheung, K. C., Yam, S. C. P. and Zhang, Y. (2022). Satisficing Credibility for Heterogeneous Risks. **European Journal of Operational Research**, 298(2), 752-768. (IF(Clarivate 2023) = 6.0, NC = 3). https://doi.org/10.1016/j.ejor.2021.07.020

Risk- Management and Ruin Theory

1) Cheung, K. C., Rong, Y., and Yam, S. C. P. (2014). Borch's Theorem from the Perspective of Comonotonicity. **Insurance: Mathematics and Economics**, 54, 144-151. (IF(Clarivate 2023) = 1.9, NC = 118 https://doi.org/10.1016/j.insmatheco.2013.11.006
2) Chau, K. W., Yam, S. C. P., and Yang, H. (2015). Fourier-cosine Method for Ruin Probabilities. **Journal of Computational and Applied Mathematics**, 281, 94-106. (IF(Clarivate 2023) = 2.1, NC = 29). https://doi.org/10.1016/j.cam.2014.12.014
3) Chau, K. W., Yam, S. C. P., and Yang, H. (2015). Fourier-cosine Method for Gerber-Shiu Functions. **Insurance: Mathematics and Economics**, 61, 170-180. (IF(Clarivate 2023) = 1.9, NC = 33). https://doi.org/10.1016/j.insmatheco.2015.01.008
4) Cheung, K. C., Chong, W. F. A., Elliott, R., and Yam, S. C. P. (2015). Disappointment Aversion Premium Principle. **ASTIN Bulletin**, 45(03), 679-702. (IF(Clarivate 2023) = 1.7, NC = 4). https://doi.org/10.1017/asb.2015.12
5) Cheung, K. C., Dhaene, J., Rong, Y., and Yam, S. C. P. (2018). Probabilistic Solutions for a Class of Deterministic Optimal Allocation Problems. **Journal of Computational and Applied Mathematics**, 336, 394-407. (IF(Clarivate 2023) = 2.1, NC = 1). https://doi.org/10.1016/j.cam.2017.12.052
6) Li, X. L., Shi, Y. F., Yam, S. C. P. and Yang, H. (2021). Fourier-cosine Method for Finite-time Gerber-Shiu Functions. **SIAM Journal on Scientific Computing**, 43(3), 650-677. (IF(Clarivate 2023) = 3.0, NC = 12). https://doi.org/10.1137/20M1328580
7) Lee, W. Y. B., Liu, F., and Yam, S. C. P. (2021). Fourier-cosine Method for Finite-time Ruin Probabilities. **Insurance: Mathematics and Economics**, 99, 256-267. (IF(Clarivate 2023) = 1.9, NC = 10). https://doi.org/10.1016/j.insmatheco.2021.03.001
8) Chen, Y., Cheung, K. C., Yam, S. C. P., Yuen, F. L., and Zeng, J. (2023). On the Diversification Effect in Solvency II for Extremely Dependent Risks. **Risks**, 11(8), 143. (IF(Clarivate 2023) = 2.0, NC = 2). https://doi.org/10.3390/risks11080143

Applied Mathematics

Analysis and PDEs

1) Lyons, T. J., and Yam, S. C. P. (2006). On Gauss–Green Theorem and Boundaries of a Class of Hölder Domains. **Journal de Mathématiques Pures et Appliquées**, 85(1), 38-53. (IF(Clarivate 2023) = 2.1, NC = 14). https://doi.org/10.1016/j.matpur.2005.10.005
2) Bensoussan, A., Mertz, L., and Yam, S. C. P. (2012). Long Cycle Behavior of the Plastic Deformation of an Elasto-perfectly-plastic Oscillator with Noise. **Comptes Rendus Mathematique**, 350(17), 853-859. (IF(Clarivate 2023) = 1.318, NC = 11). https://doi.org/10.1016/j.crma.2012.09.020
3) Cheung, P. L., Ng, T. W., Tsai, J., and Yam, S. C. P. (2014). Higher-Order, Polar and Sz.-Nagy's Generalized Derivatives of Random Polynomials with Independent and Identically Distributed Zeros on the Unit Circle. **Computational Methods and Function Theory**, 15(1), 159-186. (IF(Clarivate 2023) = 0.6, NC = 14). https://doi.org/10.1007/s40315-014-0097-4
4) Jasso-Fuentes, H., Mertz, L., and Yam, S. C. P. (2014). Approximate Solutions of a Stochastic Variational Inequality Modeling an Elasto-plastic Problem with Noise. **Applied Mathematics Research eXpress**, 2014(1), 52-73. (NC = 4). https://doi.org/10.1093/amrx/abt003
5) Bensoussan, A., Feau, C., Mertz, L., and Yam, S. C. P. (2014). An Analytical Approach for the Growth Rate of the Variance of the Deformation Related to an Elasto-Plastic Oscillator Excited by a White

Noise. **Applied Mathematics Research eXpress**, 2015(1), 99-128. (NC = 7). https://doi.org/10.1093/amrx/abu008

6) Bensoussan, A., Frehse, J., and Yam, S. C. P. (2015). The Master Equation in Mean Field Theory. **Journal de Mathématiques Pures et Appliquées**, 103(6), 1441-1474. (IF(Clarivate 2023) = 2.1, NC = 186). https://doi.org/10.1016/j.matpur.2014.11.005
7) Bensoussan, A., Mertz, L., and Yam, S. C. P. (2016). Non-local Boundary Value Problems of a Stochastic Variational Inequality Modeling an Elasto-plastic Oscillator Excited by a Filtered Noise. **SIAM Journal on Mathematical Analysis**, 48(4), 2783-2805. (IF(Clarivate 2023) = 2.2, NC = 4). https://doi.org/10.1137/16M1056237
8) Bensoussan, A., Li, Y., and Yam, S. C. P. (2018). Backward stochastic dynamics with a subdifferential operator and non-local parabolic variational inequalities. **Stochastic Processes and their Applications**, 128(2), 644-688. (IF(Clarivate 2023) = 1.1, NC = 5). https://doi.org/10.1016/j.spa.2017.06.005
9) Bensoussan, A., Frehse, J., and Yam, S. C. P. (2021). Systems of Quasilinear Parabolic Equations in R^n and Systems of Quadratic BSDEs. **Journal de Mathématiques Pures et Appliquées**, 149, 135-185. (IF(Clarivate 2023) = 2.1). https://doi.org/10.1016/j.matpur.2021.01.006

Control Theory and Optimization

1) Yang, Z., Yam, S. C. P., Li, L. K., and Wang, Y. (2010). Universal Repetitive Learning Control for Nonparametric Uncertainty and Unknown State-dependent Control Direction Matrix. **IEEE Transactions on Automatic Control**, 55(7), 1710-1715. (IF(Clarivate 2023) = 6.2, NC = 33). https://doi.org/10.1109/TAC.2010.2046935
2) Yang, Z., Yam, S. C. P., Li, L. K., and Wang, Y. (2011). Robust Control for Uncertain Nonlinear Systems with State-dependent Control Direction. **International Journal of Robust and Nonlinear Control**, 21(1), 106-118. (IF(Clarivate 2023) = 3.2, NC = 8). https://doi.org/10.1002/rnc.1582
3) Bensoussan, A., Sung, K. C. J., and Yam, S. C. P. (2013). Linear-quadratic Time-inconsistent Mean Field Games. **Dynamic Games and Applications**, 3(4), 537-552. (IF(Clarivate 2023) = 1.8, NC = 30). https://doi.org/10.1007/s13235-013-0090-y
4) Bensoussan, A., Siu, C. C., Yam, S. C. P., and Yang, H. (2014). A Class of Non-zero-sum Stochastic Differential Investment and Reinsurance Games. **Automatica**, 50(8), 2025-2037. (IF(Clarivate 2023) = 4.8, NC = 132). https://doi.org/10.1016/j.automatica.2014.05.033
5) Bensoussan, A., Sung, K. C. J., Yam, S. C. P., and Yung, S. P. (2014). Linear-Quadratic Mean Field Games. **Journal of Optimization Theory and Applications**, 169(2), 496-529. (IF(Clarivate 2023) = 1.6, NC = 309). https://doi.org/10.1007/s10957-015-0819-4
6) Bensoussan, A., Chau, M. H. M., and Yam, S. C. P. (2015). Mean Field Games with a Dominating Player. **Applied Mathematics and Optimization**, 74(1), 91-128. (IF(Clarivate 2023) = 1.6, NC = 100). https://doi.org/10.1007/s00245-015-9309-1
7) Bensoussan, A., Chau, M. H. M., and Yam, S. C. P. (2015). Mean Field Stackelberg Games: Aggregation of Delayed Instructions. **SIAM Journal on Control and Optimization**, 53(4), 2237–2266. (IF(Clarivate 2023) = 2.2, NC = 64). https://doi.org/10.1137/140993399
8) Bensoussan, A., Chau, M. H. M., Lai, Y., and Yam, S. C. P. (2017). Linear Quadratic Mean Field Stackelberg Games with State and Control Delays. **SIAM Journal on Control and Optimization**, 55(4), 2748-2781. (IF(Clarivate 2023) = 2.2, NC = 49). https://doi.org/10.1137/15M1052937

9) Chau, M. H. M., Lai, Y. and Yam, S. C. P. (2017). Discrete-Time Mean Field Partially Observable Controlled Systems Subject to Common Noise. Invited article in the **Special Issue on Mean Field Games in Applied Mathematics and Optimization**, 76(1), 59-91. (IF(Clarivate 2023) = 1.6, NC = 4). https://doi.org/10.1007/s00245-017-9437-x
10) Bensoussan, A., Cass, T., Chau, M. H. M., and Yam, S. C. P. (2019). Mean Field Games with Parametrized Followers. **IEEE Transactions on Automatic Control**, 65(1), 12-27. (IF(Clarivate 2023) = 6.2, NC = 6). https://doi.org/10.1109/TAC.2019.2910945
11) Bensoussan, A., Djehiche, B., Tembine, H. and Yam, S. C. P. (2019). Mean-Field-Type Games with Jump and Regime Switching. **Dynamic Games and Applications**, 10, 19-57. (IF(Clarivate 2023) = 1.8, NC = 21). https://doi.org/10.1007/s13235-019-00306-2
12) Bensoussan, A., Chen, S., Chutani, A., Sethi, S. P. and Yam, S. C. P. (2019). Feedback Stackelberg-Nash Equilibria in Mixed Leadership Games with an Application to Cooperative Advertising. **SIAM Journal on Control and Optimization**, 57(5), 3413-3444. (IF(Clarivate 2023) = 2.2, NC = 29). https://doi.org/10.1137/17M1153212
13) Bensoussan, A., and Yam, S. C. P. (2021). Mean Field Approach to Stochastic Control with Partial Information. **Special Issue in the Honor of Enrique Zuazua's 60th Birthday** in **ESAIM: Control, Optimisation and Calculus of Variations**, 27: 89. (IF(Clarivate 2023) = 1.3, NC = 11). https://doi.org/10.1051/cocv/2021085
14) Bensoussan, A., Huang, Z., and Yam, S. C. P. (2023). Control theory on Wasserstein space: a new approach to optimality conditions. **Special Issue Dedicated to the Memory of Professor Roland Glowinski** of **Annals of Mathematical Sciences and Applications**, 8(3): 565-628. (IF(Clarivate 2023) = 0.4, NC = 2). https://dx.doi.org/10.4310/AMSA.2023.v8.n3.a6
15) Bensoussan, A., Huang, Z., and Yam, S. C. P. (2023). Maximum Principle for Mean Field Type Control Problems with General Volatility Functions. Invited article in **Special Issue in Honor of Pierre Bernhard's 80th Birthday** of **International Game Theory Review**, 26(2): 2440003. (IF(Clarivate 2023) = 0.4, NC = 1). https://doi.org/10.1142/S0219198924400036
16) Chu, D., Ng, T. H., Yam, S. C. P. Zheng, H. (2025). Mean Field Analysis of Two-Party Governance: Competition versus Cooperation among Leaders. **Automatica**, 173, 112028. (IF(Clarivate 2023) = 4.8). https://doi.org/10.1016/j.automatica.2024.112028
17) Bensoussan, A., Huang, Z., Tang, S., and Yam, S. C. P. (2024). Degenerate Mean Field Type Control with Linear and Unbounded Diffusion, and their Associated Equations. Under revision at **SIAM Journal on Mathematical Analysis**.
18) Bensoussan, A., H. M. Tai, and Yam, S. C. P. (2025). Mean Field Type Control Problems, Some Hilbert-space-valued FBSDEs, and Related Equations. To appear in **ESAIM: Control, Optimisation and Calculus of Variations**.
19) Bensoussan, A., Wong, T. K., Yam, S. C. P., and Yuan, H. W. (2025). A Theory of First Order Mean Field Type Control Problems and their Equations. Under review at **Journal of the European Mathematical Society**.
20) Bensoussan, A., Huang, Z., Tang, S., and Yam, S. C. P. (2025). On Mean Field Monotonicity Conditions from Control Theoretical Perspective. Submitted to Special Issue Dedicated to the Memory of Giuseppe Da Prato of **Rendiconti Lincei – Matematica e Applicazioni**.

Mathematical Finance
Market Structure and Pricing

1) Yam, S. C. P., and Yang, H. (2006). On Valuation of Derivative Securities: A Lie Group Analytical Approach. **Applications of Mathematics**, 51(1), 49-61. (IF(Clarivate 2023) = 0.6, NC = 1). https://doi.org/10.1007/s10492-006-0004-z
2) Wright, J. A., Yam, P. S., and Yang, H. (2011). On the Probability of Completeness for Large Markets. **Japan Journal of Industrial and Applied Mathematics**, 28(2), 301-313. (IF(Clarivate 2023) = 0.7). https://doi.org/10.1007/s13160-011-0040-2
3) Yam, S. C. P., Yung, S. P., and Zhou, W. (2014). Game Call Options Revisited. **Mathematical Finance**, 24(1), 173-206. (IF(Clarivate 2023) = 1.6, NC = 23). https://doi.org/10.1111/mafi.12000
4) Yam, S. C. P., Zhou, W. (2016). Optimal Liquidation of Child Limit Orders. **Mathematics of Operations Research**, 42(2), 546-575. (IF(Clarivate 2023) = 1.4, NC = 4). https://doi.org/10.1287/moor.2016.0816
5) Kennedy, A. P., Sethi, S. P., Siu, C. C., and Yam, S. C. P. (2021). Co-op Advertising in a Dynamic Three-Echelon Supply Chain. **Production and Operations Management**, 30(11), 3881-3905. (IF(Clarivate 2023) = 4.8, NC = 23). https://doi.org/10.1111/poms.13487
6) Han, J., Ma, G., and Yam, S. C. P. (2022). Relative Performance Evaluation for Dynamic Contracts in a Large Competitive Market. **European Journal of Operational Research**, 302(2), 768-780. (IF(Clarivate 2023) = 6.0, NC = 12). https://doi.org/10.1016/j.ejor.2022.01.017
7) Han, J., Sethi, S. P., Siu, C. C., and Yam, S. C. P. (2022). Co-op Advertising in Randomly Fluctuating Markets. **Production and Operations Management**, 32(6), 1617-1635. (IF(Clarivate 2023) = 4.8, NC = 10). https://doi.org/10.1111/poms.13929
8) Han, J., Li, X., Sethi, S. P., Siu, C. C. and Yam, S. C. P. (2024). Production Management with General Demands and Lost Sales. **Operations Research**, 72(5), 1751-1764. (IF(Clarivate 2023) = 1.4). https://doi.org/10.1287/opre.2022.0191
9) Kennedy, A. P., Sethi, S. P., Siu, C. C. and Yam, S. C. P. (2024). The Generalized Sethi Advertising Model. **Operations Research**, 72(4), 1526-1535. (IF(Clarivate 2023) = 1.4). https://doi.org/10.1287/opre.2021.0717
10) Kennedy, A. P., Prasad, A., Sethi, S. P., Siu, C. C. and Yam, S. C. P. (2023). Optimal Advertising and Product Durability Decisions in New Product Diffusion. Under revision in **Automatica**.
11) Han, J., Naik, P. A., Sethi, S. P., Siu, C. C, and Yam, S. C. P. (2025). Optimal Multimedia Advertising in Markets with Regime Switching. Under revision in **Management Science**.

Portfolio Strategy and Risk Management

1) Yam, S. C. P., Yung, S. P., and Zhou, W. (2012). Optimal Selling Time in Stock Market over a Finite Time Horizon. **Acta Mathematicae Applicatae Sinica**, English Series, 28(3), 557-570. (IF(Clarivate 2023) = 0.9, NC = 18). https://doi.org/10.1007/s10255-012-0169-z
2) Wei, J., Wong, K. C., Yam, S. C. P., and Yung, S. P. (2013). Markowitz's Mean–variance Asset–liability Management with Regime Switching: A Time-consistent Approach. **Insurance: Mathematics and Economics**, 53(1), 281-291. (IF(Clarivate 2023) = 1.9, NC = 85). https://doi.org/10.1016/j.insmatheco.2013.05.008
3) Yam, S. C. P., Yung, S. P., and Zhou, J. H. (2013). A Mean-variance Portfolio Selection Problem Subject to a Benchmark Constraint: An Existence Result. **Risk and Decision Analysis**, 4(1), 25-38. (NC = 3). https://doi.org/10.3233/RDA-2012-0075

4) Bensoussan, A., Wong, K. C., Yam, S. C. P., and Yung, S. P. (2014). Time-consistent Portfolio Selection under Short-selling Prohibition: From Discrete to Continuous Setting. **SIAM Journal on Financial Mathematics**, 5(1), 153-190. (IF(Clarivate 2023) = 1.4, NC = 67). https://doi.org/10.1137/130914139
5) Yam, S. C. P., Yang, H., and Yuen, F.L. (2016). Optimal Asset Allocation: Risk and Information Uncertainty. **European Journal of Operational Research**, 251(2), 554-561. (IF(Clarivate 2023) = 6.0, NC = 24). https://doi.org/10.1016/j.ejor.2015.11.011
6) Wong, K. C., Yam, S. C. P., and Zheng, H. (2017). Utility-Deviation-Risk Portfolio Selection. **SIAM Journal on Control and Optimization**, 55(3), 2024-2051. (IF(Clarivate 2023) = 2.2, NC = 18). https://doi.org/10.1137/140986256
7) Bensoussan, A., Wong, K. C., and Yam, S. C. P. (2019). A Paradox in Time Consistency in Mean-variance Problem? **Finance and Stochastics**, 23(1), 173-207. (IF(Clarivate 2023) = 1.1, NC = 22). https://doi.org/10.1007/s00780-018-00381-0
8) Wong, K. C., Yam, S. C. P., and Zeng, J. (2019). Mean-risk Portfolio Management with Bankruptcy Prohibition. **Insurance: Mathematics and Economics**, 85(C), 153-172. (IF(Clarivate 2023) = 1.9, NC = 6). https://doi.org/10.1016/j.insmatheco.2019.01.005
9) Cheung, K. C., Ling, H. K. B., Tang, Q., Yam, S. C. P., and Yuen, F. L. K., (2019). On Additivity of Tail Comonotonic Risks. **Scandinavian Actuarial Journal**, 10, 837-866. (IF(Clarivate 2023) = 1.6, NC = 7). https://doi.org/10.1080/03461238.2019.1626762
10) Bensoussan, A., Cheung, K. C., Li, Y. and Yam, S. C. P. (2022). Inter-temporal Mutual Fund Management. **Mathematical Finance**, 32(3), 825-877. (IF(Clarivate 2023) = 1.6, NC = 6). https://doi.org/10.1111/mafi.12349
11) Bensoussan, A., Ma, G. Siu, C. C., and Yam, S. C. P. (2021). Dynamic Mean-variance Problem with Frictions. **Finance and Stochastics**, 26(2), 267-300. (IF(Clarivate 2023) = 1.1, NC = 9). https://doi.org/10.1007/s00780-022-00474-x
12) Ma, G., Siu, C. C., Yam, S. C. P. and Zhou, Z. (2023). Dynamic Trading with Markov Liquidity Switching. **Automatica**, 155: 111556. (IF(Clarivate 2023) = 4.8, NC = 1). https://doi.org/10.1016/j.automatica.2023.111156

Probability Theory and Stochastic Analysis

1) Yam, S. C. P., Yung, S. P., and Zhou, W. (2009). Two Rationales behind The 'Buy-and-hold or Sell-at-once' Strategy. **Journal of Applied Probability**, 46(3), 651-668. (IF(Clarivate 2023) = 0.7, NC = 25). https://doi.org/10.1239/jap/1253279844
2) Yam, S. C. P., Yung, S. P., and Zhou, W. (2013). A Unified "Bang-Bang" Principle with Respect to *R*-Invariant Performance Benchmarks. SIAM: **Theory of Probability & Its Applications**, 57(2), 357-366. (IF(Clarivate 2023) = 0.5, NC = 4). https://doi.org/10.1137/S0040585X97986035
3) Bensoussan, A., Yam, S. C. P., and Zhang, Z. (2015). Well-posedness of Mean-field Type Forward–backward Stochastic Differential Equations. **Stochastic Processes and their Applications**, 125(9), 3327-3354. (IF(Clarivate 2023) = 1.1, NC = 70). https://doi.org/10.1016/j.spa.2015.04.006
4) Wright, J. A., Yam, S. C. P., and Zhang, Z. (2018). Enlargement of Filtration on Poisson Space: a Malliavin Calculus Approach. **Stochastics**, 90(5), 682-700. (IF(Clarivate 2023) = 0.8, NC = 3). https://doi.org/10.1080/17442508.2017.1415340
5) Bensoussan, A., and Yam, S. C. P. (2019). Control Problem on Space of Random Variables and Master Equation. **ESAIM: Control, Optimisation and Calculus of Variations**, 25: 10. (IF(Clarivate 2023) = 1.3, NC = 42). https://doi.org/10.1051/cocv/2018034

6) Bensoussan, A., Frehse, J., and Yam, S. C. P. (2017). On the Interpretation of the Master Equation. **Stochastic Processes and their Applications**, 127(7). 2093-2137. (IF(Clarivate 2023) = 1.1, NC = 102). https://doi.org/10.1016/j.spa.2016.10.004
7) Privault, N., Yam, S. C. P., and Zhang, Z. (2017). Poisson Discretizations of Wiener Functionals and Malliavin Operators with Wasserstein Estimates. **Stochastic Processes and their Applications**, 129(9), 3376-3405. (IF(Clarivate 2023) = 1.1, NC = 1). https://doi.org/10.1016/j.spa.2018.09.015
8) Wong, Danny T. K. and Yam, S. C. P. (2018). A Probabilistic Proof for Fourier Inversion Formula. **Statistics & Probability Letters**, 141, 135-142. (IF(Clarivate 2023) = 0.9). https://doi.org/10.1016/j.spl.2018.05.028
9) Bensoussan, A., Graber, P. J. and Yam, S. C. P. (2024). Control on Hilbert Spaces and Application to Mean Field Type Control. **Annals of Applied Probability**, 34(4), 4085-4136. https://imstat.org/journals-and-publications/annals-of-applied-probability/annals-of-applied-probability-future-papers/
10) Han, J., Privault, N., and Yam, S. C. P. (2021). Universal Poisson Discretization of Financial Diffusion Models. Under revision in **Finance and Stochastics**.
11) Han, J., and Yam, S. C. P. (2022). A Probabilistic Method for a Class of Non-Lipschitz BSDEs with Application to Fund Management. **SIAM Journal on Control and Optimization**, 60(3), 1193-1222. (IF(Clarivate 2023) = 2.2, NC = 3). https://doi.org/10.1111/mafi.12349

Statistical Theory and Applications

Asymptotic Theory

1) Chan, K. C. G., and Yam, S. C. P. (2014). Oracle, Multiple Robust and Multipurpose Calibration in a Missing Response Problem. **Statistical Science**, 29(3), 380-396. (IF(Clarivate 2023) = 3.9, NC = 63). https://doi.org/10.1214/13-STS461
2) Chan, K. C. G., Yam, S. C. P., and Zhang, Z. (2015). Globally Efficient Nonparametric Inference of Average Treatment Effects by Empirical Balancing Calibration Weighting. **Journal of the Royal Statistical Society: Series B**, 78(3), 673-700. (IF(Clarivate 2023) = 3.1, NC = 229). https://doi.org/10.1111/rssb.12129
3) Chan, K. C. G., Ling, H. K. B., Sit, T., and Yam, S. C. P. (2018). Estimation of a Monotone Density in S-sample Biased Sampling Models. **Annals of Statistics**, 46(5), 2125-2152. (IF(Clarivate 2023) = 3.2, NC = 4). https://doi.org/10.1214/17-AOS1614
4) Kennedy, A. P. and Yam, S. C. P. (2020). On the Authenticity of COVID-19 Case Figures. **PLOS ONE**, 15(12): e0243123. (IF(Clarivate 2023) = 2.9, NC = 27). https://doi.org/10.1371/journal.pone.0243123
5) Chan, K. C. G., Ling, H. K. B., Sit, T., and Yam, S. C. P. (2021). On Asymptotic Equivalence of the NPMLE of a Monotone Density and a Grenander-type Estimator in Multi-sample Biased Sampling Models. **Electronic Journal of Statistics**, 15(1), 2876-2904. (IF(Clarivate 2023) = 1.0). https://doi.org/10.1214/21-EJS1812
6) Brown, M., Cohen, J., Tang, C. F., and Yam, S. C. P. (2021). Taylor's Law of Fluctuation Scaling for Semivariances and Higher Moments of Heavy-tailed Data. **Proceedings of the National Academy of Sciences of the United States of America**, 118(46): e2108031118. (IF(Clarivate 2023) = 9.4, NC = 5). https://doi.org/10.1073/pnas.2108031118
7) Chan, K. C. G., Han, J., Kennedy, A. P. and Yam, S. C. P. (2022). Testing Network Autocorrelation Without Replicates. **PLOS ONE**, 17(11): e0275532. (IF(Clarivate 2023) = 2.9, NC = 2). https://doi.org/10.1371/journal.pone.0275532

8) Chan, K. C. G., Ling, H. K. and Yam, S. C. P. (2023). On Nonparametric Estimation for Cross-sectional Sampled Data under Stationarity. **Electronic Journal of Statistics**, 17(2): 2745-2809. (IF(Clarivate 2023) = 1.0).
https://doi.org/10.1214/23-EJS2163

Data Analytics and Machine Learning

1) Bensoussan, A., Li, Y., Nguyen, D. P. C., Tran, M. B., Yam, S. C. P. and Zhou, X. (2022). Machine Learning and Control Theory. **Handbook of Numerical Analysis**, 23, 531-558. (NC = 23). https://doi.org/10.1016/bs.hna.2021.12.016
2) Bensoussan, A., Han, J., Yam, S. C. P. and Zhou, X. (2021). Value-Gradient based Formulation of Optimal Control Problem and Machine Learning Algorithm. **SIAM Journal of Numerical Analysis**, 61(2), 973-994. (IF(Clarivate 2023) = 5.3, NC = 4).
https://doi.org/10.1137/21M1442838
3) Chen, Y., Cheung, K. C., Sun, R. Z. and Yam, S. C. P. (2024). A User Guide of CART and Random Forests with Applications in FinTech and InsurTech. Invited article in **Special Issue on Risk and Statistics in Actuarial Science** of **Japanese Journal of Statistics and Data Science**, 7, 999-1038. (IF(Clarivate 2023) = 1.1).
https://doi.org/10.1007/s42081-024-00258-x

Financial Statistics

1) Chan, N. H., and Yam, S. C. P. (2012). Higher-order Asymptotics in Finance. Wiley Interdisciplinary Reviews: **Computational Statistics**, 4(6), 571-587. (IF(Clarivate 2023) = 1.0).
https://doi.org/10.1002/wics.1234
2) Hui, E. C., Yam, S. C. P., and Chen, S. W. (2012). Shiryaev-Zhou Index–a Noble Approach to Benchmarking and Analysis of Real Estate Stocks. **International Journal of Strategic Property Management**, 16(2), 158-172. (IF(Clarivate 2023) = 2.0, NC = 10).
https://doi.org/10.3846/1648715X.2011.638946
3) Wong, W. K., Wright, J. A., Yam, S. C. P., and Yung, S. P. (2012). A Mixed Sharpe Ratio. **Risk and Decision Analysis**, 3(1-2), 37-65. (NC = 25).
https://doi.org/10.3233/RDA-2012-0051
4) Hui, E. C. M., Wright, J. A., and Yam, S. C. P. (2014). Calendar Effects and Real Estate Securities. **The Journal of Real Estate Finance and Economics**, 49(1), 91-115. (IF(Clarivate 2023) = 1.7, NC = 25). https://doi.org/10.1007/s11146-012-9398-4
5) Hui, E., Yam, P., Wright, J., and Chan, K. (2014). Shall We Buy and Hold? Evidence from Asian Real Estate Markets. **Journal of Property Investment and Finance**, 32(2), 168-186. (IF(Clarivate 2023) = 1.6, NC = 1).
https://doi.org/10.1108/JPIF-09-2013-0059
6) Hui, E. C., and Yam, S. C. P. (2014). Can We Beat the "Buy-and-hold" Strategy? Analysis on European and American Securitized Real Estate Indices. **International Journal of Strategic Property Management**, 18(1), 28-37. (IF(Clarivate 2023) = 2.0, NC = 23). https://doi.org/10.3846/1648715X.2013.862190
7) Wright, J. A., Yam, S. C. P., and Yung, S. P. (2014). A Test for the Equality of Multiple Sharpe Ratios. **The Journal of Risk**, 16(4), 3. (IF(Clarivate 2023) = 0.3, NC = 45).
https://doi.org/10.21314/JOR.2014.289

4. Refereed Publications: Book Chapters/Proceedings

1) Bensoussan, A., Wong, K. C., and Yam, S. C. P. (2012). Mean-variance Precommitment Policies Revisited via a Mean-field Technique. **Recent Advances in Financial Engineering 2012**, 177-198. (NC = 9).
https://doi.org/10.1142/9789814571647_0008

2) Cheung, P. L., Ng, T. W., and Yam, S. C. P. (2014). Critical Points of Random Finite Blaschke Products with Independent and Identically Distributed Zeros. **Complex Analysis and Potential Theory with Applications**, 9th International Society for Analysis, its Applications and Computation (ISAAC) Congress, Krakow, Poland, in August 2013. Cambridge Scientific Publishers. (NC = 5). http://hdl.handle.net/10722/210977
3) Siu, C. C., Yam, S. C. P., and Zhou, W. (2015). Callable Stock Loans. **Recent Advances in Financial Engineering 2014**, World Scientific. (NC = 10). https://doi.org/10.1142/9789814730778_0008
4) Bensoussan, A., Frehse, J., Peng, S. and Yam, S. C. P. (2019). Parabolic Equations with Quadratic Growth in R^n. Invited book chapter in **Contributions to Partial Differential Equations and Applications**, Springer-Verlag, 91-110. https://doi.org/10.1007/978-3-319-78325-3_8
5) Bensoussan, A., Cheung, H. and Yam, S. C. P. (2022). Control in Hilbert Space and First Order Mean Field Type Problem. Invited book chapter in **Stochastic Analysis, Filtering, and Stochastic Optimization: A Commemorative Volume to Honor Mark H. A. Davies' Contributions**, Springer-Verlag. (NC = 4). https://doi.org/10.1007/978-3-030-98519-6_19

5. Preprints to be Submitted

1) Bensoussan, A., Tai, H. M., Wong, T. K., and Yam, S. C. P. A Control Theoretical Approach to Mean Field Games and Associated Master Equations. arXiv:2402.01639.
2) Bensoussan, A., Wong, T. K., Yam, S. C. P., and Yuan, H. W. Global Well-posedness of First-order Mean Field Games and Master Equations with Nonlinear Dynamics. arXiv:2311.11896.
3) Bensoussan, A., Li, B., and Yam, S. C. P. Linear Quadratic Extended Mean Field Games and Control Problems. arXiv:2311.05176.
4) Bensoussan, A., Tai, H. M., and Yam, S. C. P. Mean Field Type Control Problems, Some Hilbert-space-valued FBSDEs, and Related Equations. arXiv:2305.04019.
5) Chen, Y., Cheung, K.C., Fan, N.S., Sethi, S.P., and Yam, S.C.P. Comonotone-Independence Bayes Classifier with Applications in Finance and Insurance.
6) Liu, H., Sethi, S. P., Wong, T. K., and Yam, S. C. P. Optimal Savings and Value of Population under Stochastic Environment: Transient Behavior. arXiv:2402.10768.
7) Ng, K. T. H., Wong, T. K., and Yam, S. C. P. Selling High/Buying Low at a Good Chance.

6. Book Reviews

Carmona, R and Delarue, F. (2018). Probabilistic Theory of Mean Field Games with Applications I, II, Springer-Verlag.

KNOWLEDGE TRANSFER ACTIVITIES

Patents

1) Comonotone-Independence Bayes Classifier. U.S. Provisional Patent Application No. 63/487,282; filed on Feb. 28, 2023.

Knowledge and Technology Transfer Activities

1) One of the Croucher Scholars of Croucher Foundation to give Croucher Science Week Shows in primary and secondary schools since 2017 (https://croucherscience.hk/en/scholars).
   Recent event at HK Science Museum (Apr 2024): https://croucherscienceweek.hk/events/air-and-force
2) Delivered the talk "Risk-dom", about FinTech and Algorithmic Trading, in Credit Suisse, Hong Kong. (https://www.credit-suisse.com/hk/en.html).
3) Collaborative strategic research with actuaries from Munich Re., Japan. (https://www.munichre.com/jp/home/index.html).
4) Panel judge, ALGO Trading Competition, CASH ALGO Hong Kong since 2016. (http://algocontest.cashalgo.com/).

5) Invited speaker at Vpon Big Data Seminar, 11 May 2018. (https://www.vpon.com/en/vpon-big-data-seminar-2018-hong-kong-keeping-up-with-the-unprecedented-data-explosion/)
6) Guest speaker at a radio program STEM！想創實驗室, RTHK Radio 2, 1 Nov 2020. (https://www.rthk.hk/radio/radio2/programme/stempower/episode/713857/autoplay/archive/0).
7) Delivered the talk "Risk-dom" for secondary school students, e.g. Ying Wa College, since 2022.
8) Delivered an invited short workshop course "Financial Data Analytics" as a plenary speaker at the Australian Mathematical Sciences Institute (AMSI) Winter School 2024, in University of Queensland, Brisbane, Australia, June 2024. (https://ws.amsi.org.au/phillip-yam/).
9) Interview for a feature article on Croucher Science Week 2024, to appear in Croucher News (https://projects.croucher.org.hk/news/).
10) Panel member for shortlisting and interview of Croucher Study Awards 2025, in Dec 2024 – Feb 2025.

RESEARCH GRANTS

Competitive Grants from HKRGC in the capacity as Principal Investigator

1) (With T. Lyons) HKGRF 502408 (2009 to 2011, HKD 293,700). Application of the Theory of Rough Paths to Some Issues in Geometry.
2) (With Z. M. Ma) HKGRF 502909 (2009 to 2012, HKD 312,000). What is the Right Time to Sell a Stock?
3) (With A. Bensoussan) HKGRF 404012 (2013 to 2016, HKD 554,754). Advanced Topics in Multivariate Risk Management in Finance and Insurance.
4) HKGRF 14301015 (2015 to 2018, HKD 438,867). Advance in Mean Field Theory.
5) HKSAR-GRF 14300717 (2017 to 2020, HKD 472,351). New kinds of Forward-backward Stochastic Systems with Applications.
6) (With Gary KC Chan and Chuan-Fa Tang) HKGRF 14300319 (2019 to 2022, HKD 332,261). Shape-constrained Inference: Testing for Monotonicity.
7) (With A. Bensoussan) HKSAR-GRF 14301321 (2021 to 2024, HKD 598,015). General Theory for Infinite Dimensional Stochastic Control: Mean Field and Some Classical Problems.
8) HKSAR-GRF 14300123 (2023 to 2026, HKD 480,751). Well-posedness of Some Poisson-driven Mean Field Learning Models and their Applications.
9) (With T. Long) Germany/Hong Kong Joint Research Scheme G-CUHK411/23 (2024 to 2025, HKD 89,400). A Robust Data Analytics-based FBSDE Solver for High-dimensional Stochastic Control Problem.

Competitive Grants from HKRGC in the capacity as Co-Investigator

1) (With A. Bensoussan (P.I.) and Cedric K. F. Yiu (Co-I.)) HKGRF 500111 (2012 to 2015, HKD 1,052,000), "Advanced Problems in Inventory Theory".
2) (With A. Bensoussan (P.I.)) HKGRF 500113 (2013 to 2016, HKD 423,562), "Mean Field Games and Mean Field Type Control Theory".
3) (With A. Bensoussan (P.I.)) HKGRF 11303316 (2017 to 2019, HKD 727,647). Mean Field Control with Partial Information.
4) (With T. K. Wong (P.I.)) HKSAR-GRF 17306420 (2020 to 2023, HKD 396,967). Solving Generic Mean Field Type Problems: Interplay between Partial Differential Equations and Stochastic Analysis.
5) (With H. Yang (P.I.) and T. Long (P.I.)) Germany/Hong Kong Joint Research Scheme G-HKU701/20 (2021 to 2023, HKD 89,880). Asymmetry in Dynamically Correlated Threshold Stochastic Volatility Model.
6) (With T. K. Wong (P.I.)) HKSAR-GRF 17302521 (2021 to 2024, HKD 391,015). Controlling the Growth of Classical Solutions of a Class of Parabolic Differential Equations with Singular Coefficients: Resolutions for Some Lasting Problems from Economics.

Non-Competitive Grants in the capacity as Principal Investigator

1) (With T. Lyons) HKPU (A-PC0D) (2008 to 2010, ~HKD 80,000). New Directions in Computational Finance and Geometry via Rough Path Theory.
2) CUHK Direct Grant 2060422 (2011 to 2012, ~HKD 50,000). Optimal Insurance Design under Neo-classical Financial Theories.

3) (With Gary Chan) CUHK Direct Grant 2060444 (2012 to 2013, ~HKD 30,000). Asymptotic Statistical Analysis in Biostatistics and Finance.
4) CUHK Direct Grant 4053141 (2015 to 2016, ~HKD 30,000). Disappointment "Averse" Risk Management in Insurance.

Non-Competitive Grants in the capacity as Co-Investigator

1) (With L. K. Li) HKPU (1-ZVoH) (2008 to 2009, ~HKD 100,000). Periodic Signals for Nonlinear Systems.
2) (With Eddie C. M. Hui) HKPU Collaborative Research Grant (G-YH96) (2010 to 2012, ~HKD 100,000).

TEACHING GRANTS

In the capacity as Principal Investigator

1) (2022 to 2024). CUHK Teaching Grant: Incentive Scheme for Developing Collaborative Programmes. CUHK-Edinburgh Dual Undergraduate Degree Programmes.
2) (With Krates H. N. Ng, Suzanne H. W. So, H. Y. Au-Yeung and H. K. Tso) (2023 to 2024). CUHK Teaching Development and Language Enhancement Grant (TDLEG) for the 2022-25 Triennium (Inter-institutional Collaborative Activities (IICAs) Portion). Computational Thinking (CT) as a Problem-solving Skill – A Multidisciplinary Virtual Learning Package.

In the capacity as Co-Investigator

1) (With John A. Wright (P. I.), Cecilia Chun and K. C. Wong) (2021 to 2022). CUHK Teaching Grant: Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development. Supporting Statistics Research Postgraduates to Teach Quantitative Data Analysis to Postgraduate Students without Statistics Background – Phase I.
   *A poster presentation based on this project was awarded the **Gold Award for Educational Impact** at the 2023 Teaching and Learning Innovation Expo, CUHK.
2) (With John A. Wright (P. I.), Cecilia Chun, Y. S. Leung and K. C. Wong) (2023 to 2025). CUHK Teaching Development and Language Enhancement Grant (TDLEG) for the 2022-25 Triennium: Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development. Supporting Statistics Research Postgraduates to Teach Quantitative Data Analysis to Postgraduate Students without Statistics Background – Phase II.

AWARDS AND HONORS

1) Distinguished Visiting Scholar at School of Risk and Actuarial Studies, UNSW Sydney
2) Visiting Professorship at Naveen Jindal School of Management, University of Texas at Dallas
3) Silver Medal (2023), 48th International Exhibition of Inventions Geneva, Switzerland
4) Visiting Professorship at Department of Statistics, Columbia University in the City of New York
5) Offer of Readership (2016), Department of Mathematics, Imperial College London
6) “Excellent Teaching” in both academic years 12/13 and 15/16 granted by United College, The Chinese University of Hong Kong
7) Grant of International Partnerships Development Programme 2013-14, OAL, The Chinese University of Hong Kong, Hong Kong
8) Junior research fellowship (2007), The Erwin Schrodinger International Institute for Mathematical Physics, University of Vienna, Austria
9) Scholarships (2002 - 2003, 2004 - 2007), Croucher Foundation, Hong Kong
10) *E. M. Burnett* Prize in Mathematics (2003), University of Cambridge, United Kingdom
11) Dean's Honors Listings (1997 to 1999), The University of Hong Kong, Hong Kong

VISITING AND GUEST PROFESSORSHIP

1) Distinguished Visiting Scholar, School of Risk and Actuarial Studies, University of New South Wales, Sydney, Australia, March 2025.
2) Visiting Professor, Naveen Jindal School of Management, University of Texas at Dallas, Texas, USA, Jan 2025 to Jun 2025 and Jan 2026 to Jun 2026.

3) Visiting Professor, Department of Statistics, Columbia University in the City of New York, New York, USA, Sept 2016 to Dec 2016.
4) Research fellowships (2010 and 2013), The Hausdorff Institute of Mathematics, University of Bonn, Germany

EDITORSHIP

1) Associate Editor: *Risks — Open Access Risk Management Journal* (https://www.mdpi.com/journal/risks). From 2017 to present.
2) Associate Editor: *Journal of Industrial & Management Optimization* (https://www.aimsciences.org/journal/1547-5816) . From Jan 2019 onward.
3) Assistant Editor: *IAENG International Journal of Applied Mathematics* (http://www.iaeng.org/IJAM/editorial_board.html). From 2008 to present.
4) Associate Editor: *Insurance: Mathematics and Economics* (https://www.journals.elsevier.com/insurance-mathematics-and-economics/). From July 2019 onward. The journal will soon be ranked the top one actuarial journal with a ranking of A* in the ABDC journal list for the Australian academic community. Remark: I have been nominated as Chief Editor of the journal, with effect from summer 2025 (expected).
5) Associate Editor: *Mathematics (MDPI)* (https://www.mdpi.com/journal/mathematics). From May 2021 to present.
6) Editor: *International Journal of Data Science in the Mathematical Sciences* (https://www.worldscientific.com/worldscinet/ijdsms). From Oct 2023 to present.
7) Editor: Proceedings of 6th International Conference on Financial Technology. Feb 2025 – Nov 2025.

INVITED PRESENTATIONS/ LECTURES

Invited talks and presentations given in places:
Chinese Academy of Sciences, Hausdorff Institute of Mathematics of University of Bonn, University of Tokyo, National University of Singapore, Peking University, Jilin University, University of Hong Kong, Hong Kong University of Science and Technology, Institute of Mathematical Statistics (conferences at Gothenburg, Sweden (2010) and at Sydney, Australia (2014)), Third Conference of Tsinghua Sanya International Mathematics Forum, China Central University of Finance and Economics, Nanyang Technological University, University of Manchester, University of Waterloo, University of Lausanne, Columbia University in the City of New York, University of New South Wales, University of Melbourne, Monash University, Milano Politecnico, etc.

30+ representative research talks out of a total of 70+ talks or lectures delivered as of today with the title, conference's name, date and venue of each talk in order as listed below.

1) *Analytical and Topological Aspects of Signatures.* IMS Conference. Gothenburg, Sweden. Aug 2010.
2) *Linear-Quadratic Mean Field Games.* Bachelier Finance Society Congress. Sydney, Australia, June 2012.
3) *Risk-Minimizing Reinsurance For Multivariate Insurable Risks*. IME Conference. Hong Kong. June 2012.
4) *Conformal Invariance of the Exploration Path in 2D Critical Bond Percolation in the Square Lattice.* Tsinghua Sanya International Mathematics Forum Planar Statistical Models Workshop. Sanya, China. Jan 2013.
5) *Behavioral Optimal Insurance and its Resolution of a Socioeconomic Enigma*. Seminal talks at University of Lausanne, Lausanne, Switzerland. June 2013.
6) *Linear-Quadratic Mean Field Games and Mean Field Type Control Problems.* Stochastic Dynamics in Economics and Finance. Bonn, Germany. June 2013.
7) *Profit-Maximizing/Risk-Minimizing Reinsurance Policy Provision Via Adverse Selection*. IME Annual Meeting. Copenhagen, Denmark. July 2013.
8) *Well-posedness of Mean-Field Type Forward-Backward Stochastic Differential Equations.* Nanyang Technological University, Singapore. April 2014.
9) *Rationality under Disappointment*. 8th World Congress of the Bachelier Finance Society in Brussels, Belgium. June 2014.

10) *Mean Field Games with a Dominating Player: Theory, Examples, and Hysteresis*. IMS Annual Meeting. Sydney, Australia. July 2014.
11) *Globally Efficient Nonparametric Inference of Average Treatment Effects (ATE) by Empirical Balancing Calibration Weighting.* Academic Sinica. Taipei, Taiwan. April 2015.
12) *Paradoxes in Time Consistency in Mean-Variance Problem.* The Third Asian Quantitative Finance Conference. Hong Kong. July 2015.
13) *Fourier-cosine Method for Gerber-Shiu Functions*. Gerber-Shiu Workshop. Beijing, China. June 2016.
14) *Semi-nonparametric inference in possibly misspecified regression models with missing data*. The 4th IMS APRM. Hong Kong. June 2016.
15) *Beyond Classical Portfolio Selection.* Seminal talk at the Hong Kong University of Science and Technology, Hong Kong. Jan 2018.
16) *Systematic Risks in Non-zero-sum Investment and Reinsurance Games*. 2nd International Workshop on Optimal (Re)insurance. Beijing, China. July 2018.
17) *Inter-temporal Mutual Fund Management*. Bachelier Congress. Dublin, Ireland. July 2018.
18) *Control-Boosting Algorithm.* Big Data Challenges for Predictive Modeling of Complex Systems. Hong Kong. November 2018.
19) *Shape-constrained Inference: Monotonicity of Densities*. Seminal talk at the University of Hong Kong. March 2019.
20) *Calculus on Space of Random Variables and Mean Field Theory*. ICMS: Mean-field games, energy systems, and other applications. Edinburgh, UK. April 2019.
21) *Inter-temporal Mutual Fund Management*. 23rd International Congress on Insurance: Mathematics and Economics (IME 2019). Munich, Germany. July 2019.
22) *Optimal Savings and the Value of Population Under Stochastic Environment: Transient Behavior*. TMU Workshop on Finance 2019. Tokyo, Japan. September 2019.
23) *Calculus on Space of Random Variables and Mean Field Theory*. International Workshop on Stochastic Analysis and Applications. Osaka, Japan. November 2019.
24) *Shape-constrained Inference: Monotonicity of Densities*. An invited seminar talk given in TU Delft, CWI and the University of Amsterdam. Amsterdam, the Netherlands. January 2020.
25) *Inter-temporal Mutual Fund Management*. An invited seminar talk given in TU Delft, CWI and the University of Amsterdam. Amsterdam, the Netherlands. January 2020.
26) *Universal Poisson Approximations for Wiener Functionals Arisen in Financial Models* (virtual talk). Advances in Stochastic Analysis for Handling Risks in Finance and Insurance. September 2021.
27) *Training Deep ResNet with Batch Normalization as a First-order Mean Field Type Problem* (virtual talk). 2021 Workshop on Machine Learning & Control. November 2021.
28) *Universal Poisson Approximations for Wiener Functionals Arisen in Finance* (virtual talk). 2nd International Conference on Applied Mathematics, Modeling and Computer Simulation (AMMCS 2022). August 2022.
29) *Training Deep ResNet with Batch Normalization as a First-order Mean Field Type Problem*. 10th International Congress on Industrial and Applied Mathematics (ICIAM 2023). Tokyo, Japan. August 2023.
30) *Comonotone-Independence Bayes Classifier (CIBer) for FinTech and InsurTech* (virtual talk). 2nd International Conference on Algorithms, Network and Computer Technology (ICANCT 2023). December 2023.
31) *Financial Data Analytics*. Short workshop course at the AMSI Winter School 2024. Brisbane, Australia. June 2024.
32) *Comonotone-Independence Bayes Classifier (CIBer) for FinTech and InsurTech*. Invited talk at Workshop on Dependence Modelling: Recent developments in dependence modelling with applications in finance, insurance and pensions. Island of Ischia, Italy. September 2024.
33) *Comonotone-Independence Bayes Classifier (CIBer) for FinTech and InsurTech*. Plenary talk at 2024 Australasian Actuarial Education and Research Symposium. Melbourne, Australia. November 2024.
34) *CIBer in Action: FinTech, InsurTech and Cyber Risk.* Plenary talk for 28th International Congress on Insurance: Mathematics and Economics. Tartu, Estonia. July 2025.
35) *Effective Cyber Risk Detection via Superposed Marked Hawkes Processes*. Plenary talk for 6th International Conference on Financial Technology (ICFT 2025). Hong Kong. November 2025.

FEATURE TALKS/KEYNOTE SPEECHES/ DISTINGUISHED LECTURES (Total: 8)

1) The 2012 International Conference on Actuarial and Financial Mathematics, Chongqing University.
2) The 2014 Big data and Quantitative Behavioral Finance Conference, Nanjing University.
3) The 2014 SIAM Conference on Financial Mathematics and Engineering, Chicago, USA.
4) The 6th Asian Quantitative Finance Conference (AQFC 2018), Sun Yat-Sen University.
5) The 2018 Workshop on Machine Learning and Control Theory, University of Texas at Dallas.
6) 2021 Workshop on Machine Learning & Control. Virtual workshop. (*Pierre Louis-Lions, 1994 Fields Medallist, is another keynote speaker at the workshop.*)
7) The PUQR Symposium Dedicated to Professor Alain Bensoussan's 80th Anniversary.
8) AMSI Winter School 2024. Brisbane, Australia.
9) Workshop on Dependence Modelling: Recent developments in dependence modelling with applications in finance, insurance and pensions. Island of Ischia, Italy.
10) 2024 Australasian Actuarial Education and Research Symposium. Melbourne, Australia.
11) 28th International Congress on Insurance: Mathematics and Economics. Tartu, Estonia.
12) 6th International Conference on Financial Technology (ICFT 2025). Hong Kong.

CONFERENCE ORGANIZATION (As a major member in the organizing committee)

1) International Conference on Applied Statistics and Financial Mathematics (ASFM2010) The Hong Kong Polytechnic University 16 - 18 December 2010 (http://www.polyu.edu.hk/ama/events/conference/asfm2010/committee.html).
2) CUHK Symposium on Financial Risk Management 2014 (http://www.sta.cuhk.edu.hk/Events/WorkshopConference.aspx?udt_495_param_detail=138).
3) 2015 Joint Statistical Workshop of The Chinese University of Hong Kong and Academia Sinica (19 - 20 Apr 2015) (http://www.sta.cuhk.edu.hk/Events/WorkshopConference.aspx?udt_495_param_detail=185) .
4) The 4th Institute of Mathematical Statistics Asia Pacific Rim Meeting, June 2016. (http://ims-aprm2016.sta.cuhk.edu.hk/news)
5) CUHK-Dublin City University-HKU Symposium on Financial Risk Management 2017: Topics on Time Consistency (April 22, 2017) (http://www.sta.cuhk.edu.hk/symposium/2017/) .
6) The 7th IMS-FIPS (Finance, Insurance, Probability and Statistics) Workshop, University of Maryland, Baltimore, USA.
7) The 8th IMS-FIPS, London, UK. (https://wwwf.imperial.ac.uk/~ajacquie/FIPS2018/).
8) The 9th IMS-FIPS (Finance, Insurance, Probability and Statistics) Workshop, Fudan University, Shanghai, China. (http://www.sta.cuhk.edu.hk/ims-fips-2019.sta.cuhk.edu.hk/).
9) The 6th International Conference of Financial Technology. Hong Kong. (http://www.icft.cc)

PROFESSIONAL SOCIETY ACTIVITIES

1) Treasurer of Hong Kong Statistical Society (HKSS), 2019-2020 (http://www.hkss.org.hk/index.php/about-us/13-committee).
2) Member of HKDSE Mathematics subject committee, 2021-2024.

POSTGRADUATE STUDENTS

Graduated PhD Students (Total: 19)

Sole-Supervision

1) Lai, Y. (PhD, CUHK (Statistics), 2013-2016). Officer in the State Administration of Taxation of The People's Republic of China, China (http://www.chinatax.gov.cn/2013/n2925/) Thesis: *Topics in missing data and mean field games.*
2) Zhang, Z. (PhD, CUHK (Statistics), 2012-2015). Faculty member in Institute of Statistics and Big Data, Renmin University of China. (http://isbd.ruc.edu.cn/teacher_more.php?cid=4&id=22) Thesis: *Fully Nonparametric Estimation for Some Causal Inference Problems and Well-posedness on Mean-Field Theory. (Nominated for the best PhD thesis award in Faculty of Science)*
3) Han, J. H. (PhD, CUHK (Statistics), 2017-2021). FBSDEs and Financial Mathematics. Postdoctoral fellow in CUHK and Hang Seng University of Hong Kong. (https://www.linkedin.com/in/jinhui-han-

75759012a/)
Thesis: *Topics in Market Microstructure and Intermediation*.

4) Adrian Kennedy (PhD, CUHK (Statistics), 2018-2021), holder of HK PhD fellowship. Stochastic Control and Advertising Models. Graduate Analyst in Data and Statistics Department, Reserve Bank of New Zealand.
Thesis: *Topics on Dynamic Advertising Models*.
5) Chu, D. (PhD, CUHK (Statistics), 2019-2023). Financial Mathematics and Data Analytics. Postdoctoral Fellow at Department of Statistics, CUHK.
Thesis: *Robust Portfolio Selection with Frictions and Two-party Mean Field Stackelberg Game*.
6) Zhou, Z. (PhD, CUHK (Statistics), 2019-2023). Financial Mathematics and Data Analytics.
Thesis: *More Realistic Portfolio Selection Problem with Price Impacts*.

Co-supervision

1) Zhou, W. (PhD, HKU (Maths), 2008-2011). Vice President of Equity Derivatives Quantitative Research in JP Morgan Chase & Co., New York (https://www.linkedin.com/in/wei-zhou-805b2b40)
Thesis: *Topics in optimal stopping with applications in mathematical finance*.
2) Wright, J. A. (PhD, HKU (Maths), 2008-2011). Faculty member in Department of Statistics, CUHK. (http://www.sta.cuhk.edu.hk/JAWright/)
Thesis: *Enlargement of filtration on Poisson space and some results on the Sharpe ratio.*
3) Wong, K. C. R. (MPhil, HKU (Maths), Joint PhD in (ICL and HKU), 2013-2016). Faculty member in Dublin City University. (https://www.dcu.ie/maths/people/Kwok-Chuen-Wong.shtml)
Thesis: *Topics in portfolio management*.
4) Li, Y. (PhD CityU HK (Stochastic Control), 2014-2017). Scientific Officer of TCL.
Thesis: *Topics on Non-canonical Parabolic Partial Differential Equations with Applications*.
5) Chau, M. H. M. (Joint PhD, ICL and HKU(Mathematical finance and stochastic analysis), 2014-2017). Vice President – Quantitative Strategies, Credit Suisse, London, United Kingdom. (https://hk.linkedin.com/in/michael-chau-41900642)
Thesis: *Mean field games with imperfect information*.
6) Zhang, Y. Y. (PhD, HKU (Statistics and Actuarial Science), 2015-2018). Actuarial Science and Bayesian Statistics. Faculty member, Department of Mathematics, Southern University of Science and Technology.
(https://sites.google.com/site/yiyingzhang16)
Thesis: *Quantitative management on heterogeneous insurance portfolios.*
7) Liu, H. (PhD, HKU (Maths), 2017-2021). Analysis and PDEs. Postdoctoral fellow in Shanghai Jiao Tong University.
Thesis: *On the Well-posedness of Classical Solutions to Non-canonical Parabolic Equations Arising from Macroeconomics*.
8) Chen, Y. (PhD, HKU (Statistics and Actuarial Science), 2017-2021). Actuarial Science and Asymptotic Statistics. Faculty member at Hang Seng University of Hong Kong.
Thesis: *Data Analytics in Actuarial Science*.
9) Shi, Y. F. (Joint PhD, HKU (Statistics and Actuarial Science) and SUSTech, 2017-2021). Mathematical Finance. Factor Strategy Researcher of Mingshi Investment Management.
Thesis: *Risk Measure and Management of Insurance and Financial Portfolios*.
10) Li, X. L. (Joint PhD, HKU (Statistics and Actuarial Science) and SUSTech, 2017-2021). Mathematical Finance. Specially-engaged member of Shenzhen Futian District Financial Service Bureau.
Thesis: *Some Applications of Fourier-cosine Method in Business*.
11) Zeng, J. (Joint PhD, King's College London and HKU (Statistics and Actuarial Science), 2018-2021). Actuarial Science and Mathematical Finance. Risk Control Algorithm Engineer of Meituan, China.
Thesis: *Contributions to Risk Management and Mean-field Type Problems*.
12) Ng, Kenneth T. H. (PhD, UIUC (Mathematics and Statistics), 2020-2024). Actuarial Science and Financial Mathematics. Faculty Member at Department of Mathematics, The Ohio State University.
Thesis: *Some Optimal Control Problems in Financial and Actuarial Mathematics*.
13) Han, J. (PhD, CityU (Data Science), 2020-2024). Control Theory and PDE.
Thesis: *Value-Gradient Algorithm for Optimal Control and Residual-Quantile Adjustment Method*.

Graduated MPhil students (Total: 14)
Sole-Supervision

1) Chau, M. H. M. (MPhil, CUHK (Risk Management Science), 2012-2014). Completed Joint PhD in Mathematical Finance and Stochastic Analysis at Imperial College London and The University of Hong Kong. A Quant job offer from Credit Suisse, UK Limited. (https://hk.linkedin.com/in/michael-chau-41900642)
   Thesis: *Mean field games in the presence of a dominating player.*
2) Chong, W. F. A. (MPhil, CUHK (Risk Management Science), 2012-2014). Completed Joint PhD in Actuarial Science and Mathematical Finance at King's College London and The University of Hong Kong. Faculty Member of Department of Actuarial Mathematics and Statistics at the Heriot-Watt University.
   (https://sites.google.com/view/wingfungalfredchong/home)
   Thesis: *Disappointment Theory in Risk Management.*
3) Huang, W. (MPhil, CUHK (Risk Management Science), 2012-2014). Obtained PhD in Statistics at University of Melbourne. Faculty member in University of Melbourne.
   (https://acems.org.au/our-people/wei-huang)
   Thesis: *Asymptotic statistics and spline functions*.
4) Ling, H. K. B. (MPhil, CUHK (Risk Management Science), 2013-2015). Obtained PhD in Statistics at Columbia University in the City of New York. Faculty member, Queen's University, Canada.
   Thesis: *On dependence structure and density estimation.*
5) Zhang, X. (MPhil, CUHK (Risk Management Science), 2014-2016). Obtained PhD in Numerical Finance at University of Hong Kong. Quant at BNP Paribas. (https://hk.linkedin.com/in/xzhang22)
   Thesis: *Pricing of the quadratic variance swap via analytical approximations.*
6) Zeng, J. (MPhil, CUHK (Risk Management Science), 2016-2018). Obtained Joint PhD in King's College London and The University of Hong Kong. (http://zengjia.strikingly.com/)
   Thesis: *Further topics of Mean-Risk portfolio management.*
7) Chan, Benjamin C. H. (MPhil, CUHK (Statistics), 2017-2019). Machine Learning and Data Analytics in Finance. Research Manager at Census and Statistics Department, HKSAR. (https://hk.linkedin.com/in/benjamin-chan-chun-ho)
8) Fan, N. S. (MPhil, CUHK (Statistics), 2019-2021) Machine Learning and Data Analytics. Research Associate at Hang Seng University of Hong Kong. (https://hk.linkedin.com/in/kaiserfan)
9) Cheng, P. H. (MPhil, CUHK (Statistics); 2022-2024). Machine Learning and Statistical Theory. PhD student at Department of Statistics, Columbia University in the City of New York.
   (https://sites.google.com/view/pokhimcheng/home)

Co-Supervision

1) Liu, F. (MPhil, HKU (Maths), 2009-2011). Obtained PhD in University of Waterloo. Faculty member in Department of Statistics and Actuarial Science, University of Waterloo. (https://uwaterloo.ca/statistics-and-actuarial-science/about/people/f27liu)
   Thesis: *Two results in financial mathematics and bio-statistics.*
2) Wong, K. C. R. (MPhil, HKU (Maths), Joint PhD in (ICL and HKU), 2011-2013). Faculty member in Dublin City University. (https://www.dcu.ie/maths/people/Kwok-Chuen-Wong.shtml)
   Thesis: *Mean variance portfolio management: time consistent approach*.
3) Chau, K. W. (MPhil, HKU (Maths), 2012-2014). Obtained PhD in Numerical Finance at Delft University of Technology. Faculty member, University of Groningen, Netherlands.
   Thesis: *Fourier-cosine method for insurance risk theory.*
4) Zhang, J. (MPhil, HKU (Maths), 2021-2023). Mathematical Economics and Operational Research. PhD student at Department of Mathematics, University of Hong Kong.
   Thesis: *Generalized Itô's formulae and their applications to optimal control problems with delay*.
5) Lyu, C. (MPhil, HKU (Maths); 2022-2024). Mathematical Statistics. PhD student at Department of Statistics and Actuarial Science, University of Waterloo.
   (https://uwaterloo.ca/statistics-and-actuarial-science/contacts/chenxin-lyu)
   Thesis: *Numerical Fourier method and multi-dimensional second-order Taylor scheme for stochastic differential equations.*

Former Postdoctoral Researchers (Total: 8)

1) Ma, G. (PhD, Uni. Wollongong (Maths)). Faculty member at Xi'an Jiaotong University. (http://sef.xjtu.edu.cn/info/1086/17585.htm)
2) Chen, Y. (PhD, HKU (Statistics and Actuarial Science)). Faculty member at Hang Seng University of Hong Kong. (https://msi.hsu.edu.hk/staff/dr-chen-yongzhao/)
3) Han, J. (PhD, CUHK (Statistics)). Faculty member of Guanghua School of Management at Peking University. (https://www.linkedin.com/in/jinhui-han-75759012a)
4) Li, B. (PhD, Nankai (Probability and Statistics)). Faculty member of Center for Financial Engineering at Soochow University. (https://fineng.suda.edu.cn/20/9b/c12348a532635/page.htm)
5) Tai, H. M. (PhD, CUHK (Mathematics)). Postdoctoral Researcher of School of Mathematical Sciences at Dublin City University. (https://www.dcu.ie/maths/people/ho-man-tai)
6) Yuan, H. W. (PhD, CUHK (Mathematics)). Faculty member of Faculty of Science and Technology at University of Macao. (https://www.fst.um.edu.mo/people/hwyuan/)
7) Chu, D. (PhD, CUHK (Statistics)).
8) Zhou, Z. (PhD, CUHK (Statistics)). Research Manager at Huawei.

Current Postdoctoral Researchers (Total: 3)
1) Huang, Z. (PhD, Fudan (Mathematics)).

Current PhD Students (Total: 5)
Sole-Supervision
1) Li, J. (PhD, HKU (Statistics and Actuarial Science)). Actuarial Science and Data Analytics.
2) Da, Z. (PhD, Stony Brooks (Applied Mathematics and Statistics)).
3) Gong, W. (PhD, China Agricultural (Mathematics & Applied Mathematics)).

Co-Supervision
1) Zhang, J. (PhD, HKU (Maths)). Mathematical Economics and Operational Research.
2) Cheng, P. H. (PhD, Columbia (Statistics)). Machine Learning and Statistical Theory.

Current MPhil Students (Total: 3)
Sole-Supervision
1) Sun, Z. (MPhil, CUHK (Statistics)). Machine Learning and Statistics.
2) Chen, H. (MPhil. CUHK (Statistics)).

INTERNAL SERVICE

Department of Statistics
1) Co-Director of Interdisciplinary Major Program in *Quantitative Finance and Risk Management Science*, Department of Statistics "In terms of median admission scores for the best five subjects, four out of the top 10 programmes and streams among the JUPAS institutions in the territory are at CUHK: Medicine (MBChB) Programme Global Physician-Leadership Stream (GPS), Quantitative Finance and Risk Management Science ..." (References: Press Release of Communications and Public Relations Office, CUHK in Aug 2023)
2) Member of Departmental Graduate Studies Panel, Department of Statistics.
3) Organized and guided exchange tours for undergraduate students from Department of Statistics to East China Normal University (2018) and Zhejiang University (2019), respectively.
4) Chairperson of Department Assessment Panel, 2021-2024

Faculty of Science
1) Assistant Dean (Education)
2) Faculty Diversity and Inclusion Committee, Chairperson
3) Chairperson of Science Faculty Disciplinary Committee
4) Science Faculty Admission Committee, Member
5) Science Faculty Academic Advisor for Mainland China Students
6) Science Faculty Task Force on Public Image Building
7) Science Faculty Task Force on International Undergraduate Recruitment
8) Organized the "Women in Science" dialogue talk series, one among the first in Hong Kong, and built up a 2+2 dual degree joint program with School of Mathematics, University of Edinburgh.

College/ University

1) Member of Senate Committee on Student Discipline
2) Member of Sub-Committee on Education Technologies of the IT Governance Committee
3) Member of Panel Against Discrimination and Sexual Harassment
4) Member of Graduate School Disciplinary Committee
5) Member of Fitness to Practice (FTP) Committee of the Faculty of Medicine
6) Supervised twice final year project GEUC4011 of 6 groups in 2012/13 and 2015/16 respectively, in United College, with two times of mention of excellence teaching award (2012/2013 and 2015/2016). Besides, my Average "Teaching Effectiveness" score (adjusted) is above 5 out of 6 for classes of student size around 260.
7) As interviewers for OAL Exchange student programs in 2011 and 2012, CUHK.

EXTERNAL SERVICE

1) External examiner, the Chinese University of Hong Kong, Shenzhen, 2017 – present.
2) PhD examiners for the University of Hong Kong, Hong Kong University of Science and Technology and City University of Hong Kong.
3) External examiner, Universiti Tunku Abdul Rahman, Malaysia, 2021 – present.
4) Member of HKDSE Mathematics subject committee, 2021 – present.
5) External examiner for international research grants, such as NWO Talent Scheme, the Dutch Research Council (NWO) (funding amount concerned: ~EUR750,000), January 2022.
6) Chairman, Programme Advisory Committee, Bachelor of Science (Honours) in Actuarial Studies and Insurance, the Hang Seng University of Hong Kong, 2023 – present.
7) Panel Chair for Programme Review Exercise for Macau University of Science and Technology – Master in Applied Mathematics and Data Science, Hong Kong Council for Accreditation of Academic and Vocational Qualifications, Jan – Mar 2024.
8) Panel member for shortlisting and interview, Croucher Study Awards, Dec 2024 – Feb 2025.