Dr. Xiangfeng Yang

Address: School of Information Technology & Management,
University of International Business and Economics,
Beijing 100029, China

Office: Room 1027, Qiusuo Building

Tel: +86.10.64492662

Email: yangxf@uibe.edu.cn

Google Scholar

ABOUT ME

Xiangfeng Yang received his B.S. degree in 2011 from South-Central University for Nationalities, his M.S. degree in 2014 from Renmin University of China, and his Ph.D. degree in 2017 from Tsinghua University. Dr. Yang's research fields include uncertain game, uncertain partial differential equation, and uncertain time series analysis.

ACADEMIC CAREER

- Associate Professor (2020.1-now), School of Information Technology & Management, University of International Business and Economics
- Lecturer (2017.8-2019.12), School of Information Technology & Management, University of International Business and Economics
- Ph.D. (2014.9-2017.1), Department of Mathematical Science, Tsinghua University
- M.S. (2011.9-2014.6), School of Information, Renmin University of China
- B.S. (2007.9-2011.6), School of Mathmatics and Statistics, South-Central University for Nationalities

PAPERS

FORTHCOMING

1. L. Hu*, Z. Bai, X. Yang, M. Li, Reliability modeling and evaluation of uncertain random cold standby k-out-of-$m+n$: G systems, *Journal of Ambient Intelligence and Humanized Computing*, to be published.
2. X. Yang, H. Ke*,Uncertain interest rate model for Shanghai interbank offered rate and pricing of American swaption, *Fuzzy Optimization and Decision Making*, to be published.

2023

3. C. Wang, Y. Ni*, X. Yang, The inventory replenishment policy in an uncertain production-inventory-routing system, *Journal of Industrial and Management Optimization*, Vol.19, No.1, 549-572, 2023 (SCI, Jan.)
4. G. Yan, Y. Ni*, Q. Song, X. Yang, Pricing, carbon emission reduction and recycling decisions in a closed-loop supply chain under uncertain environment, *Journal of Industrial and Management Optimization*, Vol.19, No.1, 224-245, 2023 (SCI, Jan.)
5. Y. Xin, J. Gao, X. Yang*, J. Yang, Maximum likelihood estimation for uncertain autoregressive moving average model with application in financial market, *Journal of Computational and Applied Mathematics*, Vol.417, 114604, 2023 (SCI, Jan.)

2022

6. S. Zeng, H. Li, X. Yang*, Uncertain threshold autoregressive model via LASSO procedure, *Journal of Uncertain Systems*, Vol.15, No.4, 2243006, 2022 (Dec.)
7. Y. Gao, J. Gao*, X. Yang, Parameter estimation in uncertain delay differential equations via the method of moments, *Applied Mathematics and Computation*, Vol.431, 127311, 2022 (SCI, Oct.)

8. Z. Liu, X. Yang*, Cross validation for uncertain autoregressive model, *Communications in Statistics - Simulation and Computation*, Vol.51, No.8, 4715-4726, 2022 (SCI, ESI, Aug.)

9. C. Tian, T. Jin*, X. Yang*, Q. Liu, Reliability analysis of the uncertain heat conduction model, *Computers & Mathematics with Applications*, Vol.119, 131-140, 2022 (SCI, ESI, Aug.)

10. J. Lu, X. Yang*, M. Tian, Barrier swaption pricing formulae of mean-reverting model in uncertain environment, *Chaos, Solitons and Fractals*, Vol.160, 112203, 2022 (SCI, Jul.)

11. X. Yang, J. Gao*, S. Luo, V. Loia, A concept of nucleolus for uncertain coalitional game with application to profit allocation, *Information Sciences*, Vol.597, 244-252, 2022 (SCI, Jun.)

12. Y. Gao*, J. Gao, X. Yang, The almost sure stability for uncertain delay differential equation based on normal Lipschitz conditions, *Applied Mathematics and Computation*, Vol.420, 126903, 2022 (SCI, May)

13. H. Tang, X. Yang*, Moment estimation in uncertain differential equations based on the Milstein scheme, *Applied Mathematics and Computation*, Vol.418, 126825, 2022 (SCI, Apr.)

14. X. Yan, X. Yang*, P. Zhang, Z. Zhang, A new stock loan problem based on the mean-reverting equation in an uncertain environment, *Soft Computing*, Vol.26, No.6, 2741-2750, 2022 (SCI, Mar.)

15. B. Dai, X. Yang*, X. Liu, Shapley value of uncertain coalitional game based on Hurwicz criterion with application to water resource allocation, *Group Decision and Negotiation*, Vol.31, No.1, 241-260, 2022 (SCI, Feb.)

16. T. Ye*, X. Yang, Three-dimensional uncertain heat equation, *International Journal of Modern Physics C*, Vol.32, No.1, 2250012, 2022 (SCI, Jan.)

17. Y. Yu, X. Yang*, Q. Lei, Pricing of equity swaps in uncertain financial market, *Chaos, Solitons and Fractals*, Vol.154, 111673, 2022 (SCI, Jan.)

2021

18. Y. Zhang, J. Gao*, X. Li, X. Yang, Two-person cooperative uncertain differential game with transferable payoffs, *Fuzzy Optimization and Decision Making*, Vol.20, No.4, 567-594, 2021 (SCI, Dec.)

19. T.M. Hoang Do, G.K. Park*, K.H. Choi, X. Yang, On the application of uncertain three-player two-stage game to the competition among shipping alliances, *International Journal of Shipping and Transport Logistics*, Vol.13, No.6, 600-623, 2021 (SSCI, Dec.)

20. H. Tang, X. Yang*, Uncertain chemical reaction equation, *Applied Mathematics and Computation*, Vol.411, 126479, 2021 (SCI, Dec.)

21. T. Jin, X. Yang*, Monotonicity theorem for the uncertain fractional differential equation and application to uncertain financial market, *Mathematics and Computers in Simulation*, Vol.190, 203-221, 2021 (SCI, Dec.)

22. G. Yan, Y. Ni*, X. Yang, Pricing and recovery in a dual-channel closed-loop supply chain under uncertain environment, *Soft Computing*, Vol.25, No.21, 13679-13694, 2021 (SCI, Nov.)

23. Z. Liu, X. Yang*, Variable selection in uncertain regression analysis with imprecise observations, *Soft Computing*, Vol.25, No.21, 13377-13387, 2021 (SCI, Nov.)

24. G. Li, X. Yang*, H. Wu, Equity warrants model based on uncertain exponential Ornstein-Uhlenbeck equation, *Soft Computing*, Vol.25, No.20, 12797-12803, 2021 (SCI, Oct.)

25. M. Yang, Y. Ni*, X. Yang, D. Ralescu, The consistent vehicle routing problem under uncertain environment, *Journal of Intelligent & Fuzzy Systems*, Vol. 41, No. 2, 2797-2812, 2021 (SCI, Sep.)

26. X. Yang*, Y. Ni, Least-squares estimation for uncertain moving average model, *Communications in Statistics - Theory and Methods*, Vol.50, No.17, 4134-4143, 2021 (SCI, ESI, Sep.)

27. M. Tian, X. Yang*, Y. Zhang, Lookback option pricing problem of mean-reverting stock model in uncertain environment, *Journal of Industrial and Management Optimization*, Vol.17, No.5, 2703-2714, 2021 (SCI, Sep.)

28. Y. Xin, X. Yang, J. Gao*, Least squares estimation for the high-order uncertain moving average model with application to carbon dioxide emissions, *International Journal of General Systems*, Vol.50, No.6, 724-740, 2021 (SCI, Aug.)

29. Z. Liu, X. Yang*, Uncertain insurance risk process with single premium and multiple classes of claims, *Journal of Ambient Intelligence and Humanized Computing*, Vol.12, No.7, 7685-7702, 2021 (SCI, Jul.)

30. H. Tan, X. Yang*, Barrier option pricing of exponential Ornstein-Uhlenbeck model in uncertain environment, *International Journal of e-Navigation and Maritime Economy*, Vol.16, 24-34, 2021 (Jun.)

31. H. Li, X. Yang*, Smoothly clipped absolute deviation estimation for uncertain autoregressive model, *Journal of Intelligent & Fuzzy Systems*, Vol.40, No.6, 11875-11885, 2021 (SCI, Jun.)

32. T. Ye, X. Yang*, Analysis and prediction of confirmed COVID-19 cases in China with uncertain time series, *Fuzzy Optimization and Decision Making*, Vol.20, No.2, 209-228. 2021 (SCI, Jun.)

33. G. Ma*, X. Yang, X. Yao, A relation between moments of Liu process and Bernoulli numbers, *Fuzzy Optimization and Decision Making*, Vol.20, No.2, 261-272. 2021 (SCI, Jun.)

34. B. Dai, X. Yang*, G.K. Park, The core of uncertain coalitional game based on Hurwicz criterion with application to cyber security information sharing, *Journal of Uncertain Systems*, Vol.14, No.1, 2150003, 2021 (Mar.)

35. X. Yang*, D. Ralescu, A Dufort-Frankel scheme for one-dimensional uncertain heat equation, *Mathematics and Computers in Simulation*, Vol.181, 98-112, 2021 (SCI, Mar.)

36. T. Jin*, X. Yang, H. Xia, H. Ding, Reliability index and option pricing formulas of the first hitting time model based on the uncertain fractional-order differential equation with Caputo type, *Fractals-Complex Geometry Patterns and Scaling in Nature and Society*, Vol.29, No.1, 2150012, 2021 (SCI, ESI, Feb.)

37. D. Chen, X. Yang*, Ridge estimation for uncertain autoregressive model with imprecise observations, *International Journal of Uncertainty, Fuzziness & Knowledge-Based Systems*, Vol.29, No.1, 37-55, 2021 (SCI, Feb.)

38. Z. Liu, X. Yang*, A linear uncertain pharmacokinetic model driven by Liu process, *Applied Mathematical Modelling*, Vol.89, 1881-1899, 2021 (SCI, Jan.)

39. D. Chen, X. Yang*, Maximum likelihood estimation for uncertain autoregressive model with application to carbon dioxide emissions, *Journal of Intelligent & Fuzzy Systems*, Vol.40, No.1, 1391-1399, 2021 (SCI, Jan.)

2020

40. X. Yang*, G.K. Park, Y. Hu, Least absolute deviations estimation for uncertain autoregressive model, *Soft Computing*, Vol.24, No.23, 18211-18217, 2020 (SCI, Dec.)

41. Z. Zhang, X. Yang*, J. Gao, Uncertain autoregressive model via LASSO procedure, *International Journal of Uncertainty, Fuzziness & Knowledge-Based Systems*, Vol.28, No.6, 939-956, 2020 (SCI, Dec.)

42. X. Yang*, Y. Liu, G.K. Park, Parameter estimation of uncertain differential equation with application to financial market, *Chaos, Solitons and Fractals*, Vol.139, 110026, 2020 (SCI, Oct.)

43. X. Yang, Y. Ni*, Size relation of uncertain sets with application to clustering, *Journal of Intelligent and Fuzzy Systems*, Vol.38, No.4, 4119-4125, 2020 (SCI, Apr.)

44. G. Yan, Y. Ni*, X. Yang, Optimal pricing in recycling and remanufacturing under uncertain environment, *Sustainability*, Vol.12, No.8, 3199, 2020 (SCI, SSCI, Apr.)

45. Z. Zhang*, X. Yang, Uncertain population model, *Soft Computing*, Vol.24, No.4, 2425-2529, 2020 (SCI, Feb.)

2019

46. X. Yang*, Stability in measure for uncertain heat equations, *Discrete and Continuous Dynamical Systems Series B*, Vol.12, No.24, 6533-6540, 2019 (SCI, Dec.)

47. M. Tian, X. Yang*, Y. Zhang, Barrier option pricing of mean-reverting stock model in uncertain environment, *Mathematics and Computers in Simulation*, Vol.166, 126-143, 2019 (SCI, Dec.)

48. M. Tian, X. Yang*, S. Kar, Equity warrants pricing problem of mean-reverting model in uncertain environment, *Physica A: Statistical Mechanics and its Applications*, Vol.531, 121593, 2019 (SCI, Oct.)

49. X. Yang, Y. Ni*, Extreme values problem of uncertain heat equation, *Journal of Industrial & Management Optimization*, Vol.15, No.4, 1995-2008, 2019 (SCI, Oct.)

50. X. Yang, B. Liu*, Uncertain time series analysis with imprecise observations, *Fuzzy Optimization and Decision Making*, Vol.18, No.3, 263-278, 2019 (SCI, Sep.)

51. X. Yang*, Z. Zhang, X. Gao, Asian-barrier option pricing formulas of uncertain financial market, *Chaos, Solitons and Fractals*, Vol.123, 79-86, 2019 (SCI, Jun.)

52. Y. Li*, X. Yang, Z. Yang, Uncertain learning curve and its application in scheduling, *Computers & Industrial Engineering*, Vol.131, 534-541, 2019 (SCI, SSCI, May.)

2018

53. L. Jia, X. Yang*, Existence and uniqueness theorem for uncertain spring vibration equation, *Journal of Intelligent and Fuzzy Systems*, Vol.35, No.2, 2607-2617, 2018 (SCI).

54. L. Jia, X. Yang, X. Gao*, A new definition of cross entropy for uncertain random variables and its application, *Journal of Intelligent and Fuzzy Systems*, Vol.35, No.1, 1193-1204, 2018 (SCI).

55. L. Jia, W. Lio, X. Yang*, Numerical method for solving uncertain spring vibration equation, *Applied Mathematics and Computation*, Vol.377, 428-441, 2018 (SCI, Nov.)

56. Y. Gao, X. Yang*, Z. Fu, Lookback option pricing problem of uncertain exponential Ornstein-Uhlenbeck model, *Soft Computing*, Vol.22, No.17, 5647-5654, 2018 (SCI, Sep.)

57. X. Yang*, Solving uncertain heat equation via numerical method, *Applied Mathematics and Computation*, Vol.329, 92-104, 2018 (SCI, Jul.)

58. X. Yang, J. Gao*, Y. Ni, Resolution principle in uncertain random environment, *IEEE Transactions on Fuzzy Systems*, Vol.26, No.3, 1578-1588, 2018 (SCI, Jun.)

2017

59. X. Yang*, Y. Ni, Existence and uniqueness theorem for uncertain heat equation, *Journal of Ambient Intelligence and Humanized Computing*, Vol.8, No.5, 717-725, 2017 (SCI, Oct.)

60. X. Yang, K. Yao*, Uncertain partial differential equation with application to heat conduction, *Fuzzy Optimization and Decision Making*, Vol.16, No.3, 379-403, 2017 (SCI, ESI, Sep.)

61. J. Gao, X. Yang*, D. Liu, Uncertain Shapley value of coalitional game with application to supply chain alliance, *Applied Soft Computing*, Vol.56, 551-556, 2017 (SCI, ESI, Jul.)

62. X. Yang, J. Gao*, Bayesian equilibria for uncertain bimatrix game with asymmetric information, *Journal of Intelligent Manufacturing*, Vol.28, No.3, 515-525, 2017 (SCI, ESI, Mar.)

63. X. Yang, Y. Ni*, Y. Zhang, Stability in inverse distribution for uncertain differential equations, *Journal of Intelligent and Fuzzy Systems*, Vol.32, No.3, 2051-2059, 2017 (SCI, Feb.)

2016

64. X. Yang*, J. Gao, S. Kar, Uncertain calculus with Yao process, *IEEE Transactions on Fuzzy Systems*, Vol.24, No.6, 1578-1585, 2016 (SCI, Dec.)

65. X. Yang*, J. Gao, Linear-quadratic uncertain differential game with application to resource extraction problem, *IEEE Transactions on Fuzzy Systems*, Vol.24, No.4, 819-826, 2016 (SCI, ESI, Aug.)

66. Z. Zhang*, R. Gao, X. Yang, The stability of multifactor uncertain differential equation, *Journal of Intelligent and Fuzzy Systems*, Vol.30, No.6, 3281-3290, 2016 (SCI, Apr.)

2015

67. X. Yang*, Y. Shen, Runge-Kutta method for solving uncertain differential equations, *Journal of Uncertainty Analysis and Applications*, Vol.3, Article 17, 2015 (Dec.)

68. X. Yang*, Dan A. Ralescu, Adams method for solving uncertain differential equations, *Applied Mathematics and Computation*, Vol.270, 993-1003, 2015 (SCI, Nov.)

69. X. Yang, J. Gao*, Some results of moments of uncertain set, *Journal of Intelligent and Fuzzy Systems*, Vol.28, No.6, 2433-2442, 2015 (SCI).

2014

70. X. Yang, J. Gao*, A review on uncertain set, *Journal of Uncertain Systems*, Vol.8, No.4, 285-300, 2014 (Nov.)

71. X. Yang, J. Gao*, Uncertain core for coalitional game with uncertain payoffs, *Journal of Uncertain Systems*, Vol.8, No.1, 13-21, 2014 (Feb.)

2013

72. X. Yang, J. Gao*, Uncertain differential games with application to capitalism, *Journal of Uncertainty Analysis and Applications*, Vol.1, Article 17, 2013 (Dec.)

73. J. Gao*, X. Yang, Credibilistic bimatrix game with asymmetric information: Bayesian optimistic equilibrium strategies, *International Journal of Uncertainty, Fuzziness & Knowledge-Based Systems*, Vol.21, Suppl.1, 89-100, 2013 (SCI, Jul.)

AWARDS

1. Best Paper Award, Eighteenth International Conference on Information and Management Sciences (2019, Aug.)
2. Zhong Jiaqing Operational Research Award, Zhong Jiaqing Foundation (2019, Jul.)
3. Operation Research Newcomer, Operations Research Society of China, Uncertain System Chapter (2018, Jul.)
4. The Future Scientist Award, The 4th International Conference on Advanced Intelligent Maritime Safety and Technology (2016, Dec.)
5. Best Paper Award, The Twelfth China Annual Conference on Uncertainty (2014, Jul.)
6. Excellent Graduate, Renmin University of China (2014, Jun.)

SERVICE

1. 2021.7-, Associate Editor, Journal of Mathematics.
2. 2021.2-, Associate Editor, Journal of Uncertain Systems.
3. 2020.6-, Associate Editor, Journal of Ambient Intelligence and Humanized Computing.
4. 2020.3-, Editorial Board Member, International Journal of e-Navigation and Maritime Economy.
5. 2020, Guest Editor (3/4), Soft Computing.
6. 2018, August 4-10, Secretary, Seventeenth International Conference on Information and Management Sciences, Wuhan, China.
7. 2018, Editor, Proceedings of the Seventeenth International Conference on Information and Management Sciences.
8. 2018, Guest Editor (3/3), Soft Computing.
9. 2017, August 4-9, Secretary, Sixteenth International Conference on Information and Management Sciences, Urumqi, China.
10. 2017, Editor, Proceedings of the Sixteenth International Conference on Information and Management Sciences.
11. 2017, Guest Editor (4/4), Journal of Ambient Intelligence and Humanized Computing.
12. 2017, Guest Editor (4/4), Sustainability.
13. 2016, August 3-8, Secretary, Fifteenth International Conference on Information and Management Sciences, Xining, China.

RESEARCH PROJECTS

1. Program for Young Excellent Talents in UIBE (No.18YQ06), PI, 2018.09-2021.8.
2. Program for Research of New Teachers in UIBE (No.17QD12), PI, 2018.01-2019.12.

MASTER STUDENTS

1. Xiaojing Yan (2018.9-2020.6), Pricing analysis of stock loan based on uncertain mean-reverting equation.
2. Geng Li (2018.9-2020.6), A research on the short-term wealth effects of enterprise asset-backed securitization based on Chinese listed companies.
3. Boyang Dai (2019.9-2021.6), The core and Shapley value of uncertain coalitional game based on Hurwicz criterion.
4. Yongjiu Yu (2020.9-2022.6), Research on the pricing of stock swap in uncertain financial market.
5. Shangfeng Zeng (2020.9-2022.6), The research of uncertain threshold autoregressive model based on LASSO algorithm.
6. Huiying Tan (2020.9-2022.6), Study on barrier option pricing based on exponential Ornstein-Uhlenbeck model in uncertain environment.
7. Jing Lu (2021.9-)
8. Peng Zhang (2021.9-)
9. Sijia Yang (2021.9-)
10. Haoxuan Li (2022.9-)
11. Yunfan Zhang (2022.9-)
12. Jie Chen (2022.9-)