ZHAO Yibao

Lee Kong Chian School of Business
Singapore Management University (SMU)
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Education

PhD, National University of Singapore, Singapore, 2004

Master of Science, National University of Singapore, Singapore, 1998

Bachelor of Science, Peking University, China, 1996

Academic Appointments

Senior Lecturer of Quantitative Finance, Lee Kong Chian School of Business, SMU, Jul 2014 - Present

Lecturer of Quantitative Finance, Lee Kong Chian School of Business, SMU, Aug 2006 - Jun 2014

Teaching Assistant (Full-Time), Department of Mathematics, National University of Singapore, Singapore, Jan 2005 - Jan 2006

Teaching Assistant (Full-Time), Department of Computation Science, National University of Singapore, Singapore, Jan 2001 - Jan 2005

Awards and Honors

Dean's Teaching Honour List, Lee Kong Chian School of Business, Singapore Management University, 2022, 2008

Journal Best Paper Award (Global Economy and Finance Journal), 8th Annual London Business Research Conference, 8-9 July 2013, Imperial College, 2013

Fellowship, World Business Institute, 2013

RESEARCH

Research Interests

Numerical Methods

Publications

Journal Articles [Refereed]

Hedging derivative securities with volatility futures, by YAP, Nelson; LIM, Kian Guan; ZHAO, Yibao. (2016). *International Journal of Financial Markets and Derivatives, 5* (2-4), 111-127. https://doi.org/10.1504/IJFMD.2016.081688 (Published)

On the accuracy and stability of a variety of differential quadrature formulations for the vibration analysis of beams, by NG, C. H. W.; ZHAO, Yibao; XIANG, Y.; WEI, G. W.. (2009). *International Journal of Engineering and Applied Sciences, 1* (4), 1-25. (Published)

Comparison of discrete singular convolution and generalized differential quadrature for the vibration analysis of rectangular plates, by NG, C. H. W. ; ZHAO, Yibao; WEI, G. W.. (2004). *Computer Methods in Applied Mechanics and Engineering, 193* (23-26), 2483-1506. https://doi.org/10.1016/j.cma.2004.01.013 (Published)

A note on the numerical solution of high-order differential equations, by WANG, Y.; ZHAO, Yibao; WEI, G. W.. (2003). *Journal of Computational and Applied Mathematics, 159* (2), 387-398. https://doi.org/10.1016/s0377-0427(03)00541-7 (Published)

Parameter optimization in the regularized Shannon's kernels of higher-order discrete singular convolutions, by XIONG, Wei; ZHAO, Yibao; GU, Yun. (2003). *Communications in Numerical Methods in Engineering, 19* (5), 377-386. https://doi.org/10.1002/cnm.596 (Published)

Discrete singular convolution and its application to the analysis of plates with internal supports. Part 1: Theory and algorithm, by WEI, G. W.; ZHAO, Yibao; XIANG, Y.. (2002). *International Journal for Numerical Methods in Engineering, 55* (8), 913-946. https://doi.org/10.1002/nme.526 (Published)

Discrete singular convolution and its application to the analysis of plates with internal supports. Part 2: Applications, by XIANG, Y.; ZHAO, Yibao; WEI, G. W.. (2002). *International Journal for Numerical Methods in Engineering, 55* (8), 947-971. https://doi.org/10.1002/nme.527 (Published)

A novel approach for the analysis of high-frequency vibrations, by WEI, G. W.; ZHAO, Yibao; XIANG, Y.. (2002). *Journal of Sound and Vibration, 257* (2), 207-246. https://doi.org/10.1006/jsvi.2002.5055 (Published)

DSC analysis of rectangular plates with non-uniform boundary conditions, by ZHAO, Yibao; WEI, G. W.. (2002). *Journal of Sound and Vibration, 255* (2), 203-228. https://doi.org/10.1006/jsvi.2001.4150 (Published)

Levy solutions for vibration of multi-span rectangular. plates, by XIANG, Y.; ZHAO, Yibao; WEI, G. W.. (2002). *International Journal of Mechanical Sciences, 44* (6), 1195-1218. https://doi.org/10.1016/S0020-7403(02)00027-9 (Published)

Plate vibration under irregular internal supports, by ZHAO, Yibao; Wei, G. W.; XIANG, Y.. (2002). *International Journal of Solids and Structures, 39* (5), 1361-1383. https://doi.org/10.1016/s0020-7683(01)00241-4 (Published)

Discrete singular convolution for the prediction of high frequency vibration of plates, by ZHAO, Yibao; WEI, G. W.; XIANG, Y.. (2002). *International Journal of Solids and Structures, 39* (1), 65-88. https://doi.org/10.1016/s0020-7683(01)00183-4 (Published)

The determination of natural frequencies of rectangular plates with mixed boundary conditions by discrete singular convolution, by WEI, G. W.; ZHAO, Yibao; XIANG, Y.. (2001). *International Journal of Mechanical Sciences, 43* (8), 1731-1746. https://doi.org/10.1016/S0020-7403(01)00021-2 (Published)

Conference Proceedings

Laminar entry flow of Herschel-Bulkley fluids in a circular pipe, by GUPTA, R. C.; ZHAO, Yibao. (2000.0). *Advances in Fluid Mechanics III: Proceedings of the 3rd International Conference on Advances in Fluid Mechanics AFM 2000: Montreal, Canada, 24-26 May,* (pp. 135-144) Southampton: WIT Press. (Published)

TEACHING

Courses Taught

<u>Singapore Management University</u>

Undergraduate Programmes :

    Calculus

    Computing Technology For Finance

    Quantitative Finance

Postgraduate Professional Programmes :

    Introduction to Programming

    Programming and Computational Finance

Teaching Publications

<u>Cases</u>

Starlet, by BENOLIEL, Michael; ZHAO, Yibao. (2011). (Published)

UNIVERSITY SERVICE

Singapore Management University

Committee Member, Inter-School Scholarship Interview and Selection Committee, Sep 2019 - Jul 2021

Instructor, 2019 , Course Development of COR1201, Aug 2019 - Dec 2019

Instructor, 2019 , Course Development of COR1201, Aug 2019 - Present

Instructor, 2018 , Course Development of QF627, Oct 2018 - Dec 2019

Instructor, 2018 , Course Development of QF625, Aug 2018 - Sep 2019

Instructor, 2016 , Course Development of QF203, Jan 2017 - May 2017

Instructor, 2012 , Course Development of QF610, May 2013 - Jul 2016

Instructor, 2012 , Course Development of QF601, Aug 2012 - Dec 2016

Instructor, 2012 , Course Development of QF205, Aug 2012 - Present

Committee Member, Committee for Academic Advising, Jan 2009 - Present

Instructor, 2008, Course Development of MATH001, Aug 2008 - May 2019

Instructor, 2008 , Course Development of FNCE623, Aug 2008 - Dec 2008

Instructor, 2006 , Course Development of QF202, Aug 2006 - Dec 2016