# Zhao Yibao

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## Positions held

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|---|---|
| from 2014 | Senior Lecturer of Quantitative Finance at the Lee Kong Chian School of Business, Singapore Management University (SMU), Singapore |
| 2006-2014 | Lecturer of Quantitative Finance at the Lee Kong Chian School of Business, Singapore Management University (SMU), Singapore |
| 2005-2006 | Teaching Assistant (Full-Time), Department of Mathematics, National University of Singapore (NUS), Singapore |
| 2001-2005 | Teaching Assistant (Full-Time), Department of Computational Science, National University of Singapore (NUS), Singapore |

## Degrees

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|---|---|
| 1998-2004 | PhD, at the National University of Singapore, Singapore |
| 1996-1998 | Master of Science, National University of Singapore, Singapore |
| 1991-1996 | Bachelor of Science at the Peking University, Beijing, People's Republic of China (PRC) |

**Research areas**   Numerical Methods

## Publications (selected)

YAP, Nelson; LIM, Kian Guan; **ZHAO, Yibao. (2016)**, Hedging derivative securities with volatility futures, *International Journal of Financial Markets and Derivatives*, 5 (2-4), 111-127.

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

NG, C. H. W.; **ZHAO, Yibao**; WEI, G. W., (2004), Comparison of discrete singular convolution and generalized differential quadrature for the vibration analysis of rectangular plates, *Computer Methods in Applied Mechanics and Engineering*, 193 (23-26), 2483-2506. https://doi.org/10.1016/j.cma.2004.01.013

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

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

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

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

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

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

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

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

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

WEI, G. W., **ZHAO, Yibao**, XIANG, Y., (2001), Customer Integration - A key to an Implementation Perspective of Service Provision, *International Journal of Mechanical Sciences,* 43 (8), 1731-1746. https://doi.org/10.1016/S0020-7403(01)00021-2

*Conference presentations & publications, publications in non-English are not included.*

### Awards, positions and committees

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|---|---|
| 2024T2 | Dean's Teaching Honour List, Lee Kong Chian School of Business, Singapore Management University, Singapore |
| 2021T2 | Dean's Teaching Honour List, Lee Kong Chian School of Business, Singapore Management University, Singapore |
| 2013 | Journal Best Paper Award (Global Economy and Finance Journal), 8th Annual London Business Research Conference, 8-9 July 2013. |
| 2007T1 | Dean's Teaching Honour List, Lee Kong Chian School of Business, Singapore Management University, Singapore |

### Teaching expertise

Calculus (UG)
Stochastic Calculus (UG)
Real Analysis (UG)
Excel VBA Programming (UG)
Matlab Programming (UG)
Python Programming (UG)
Numerical Methods (UG)
Differential Equations (UG)
Mathematics for Quantitative Finance (UG)