ZHAO Yibao
Lee Kong Chian School of Business
Singapore Management University

YBZHAO@SMU.EDU.SG
Office Phone: 6828 0925

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Citizenship: Singaporean

Education

2004	Ph.D in Computational Science National University of Singapore Thesis Title: Discrete Singular Convolution for Vibration Analysis of Plates Supervisor: WEI Guowei
1998	M.Sc. in Applied Mathematics National University of Singapore Thesis Title: Integral Solutions for Developing Laminar Hershel-Bulkley Fluid Flow in a Circular Pipe Supervisor: Ramesh C. Gupta
1996	B.Sc. in Computational Mathematics Peking University

Position(s) Held

Jul 2014 - Now	Senior Lecturer of Quantitative Finance Lee Kong Chian School of Business Singapore Management University
Aug 2006 - Jun 2014	Lecturer of Quantitative Finance Lee Kong Chian School of Business Singapore Management University
Jul 2005 - Jun 2006	Teaching Assistant (Full-Time) Department of Mathematics National University of Singapore
Jul 2001 - Jun 2005	Teaching Assistant (Full-Time) Department of Computation Science National University of Singapore

Awards, Recognition and Honors

- Dean's Teaching Honour List, Lee Kong Chian School of Business, Singapore Management University, 2008
- Journal Best Paper Award (Global Economy and Finance Journal), 8th Annual London Business Research Conference, 8-9 July 2013, Imperial College, London, UK, July 2013
- Fellowship, World Business Institute, 09 July 2013

Research Interests

- Numerical Methods

Journal Articles (Refereed)

1. "On the Accuracy and Stability of a Variety of Differential Quadrature Formulations for the Vibration Analysis of Beams", by CHW NG, Yibao ZHAO, Y. XIANG, and GW WEI, 2009, 1, 4*, International Journal of Engineering & Applied Sciences*, 1-25

2. "Comparison of discrete singular convolution and generalised differential quadrature for the vibration analysis of rectangular plates", by CHW NG, Yibao ZHAO, and GW WEI, 2004, (23-26)*, Computer methods in applied mechanics and engineering*, 2483-2506

3. "A note on the numerical solution of high-order differential equations", by Y. WANG, Yibao ZHAO, and GW WEI, 2003, 159, 2*, Journal of Computational and Applied Mathematics*, 387-398

4. "Parameter optimization in the regularized Shannon's Kernels of higher-order discrete singular convolutions", by W. XIONG, Yibao ZHAO, and Y. GU, 05/2003, 19, 5*, Communications in Numerical Methods for Engineering*, 377-386

5. "Discrete singular convolution and its application to the analysis of plates with internal supports", by Y. XIANG, Yibao ZHAO, and GW WEI, 11/2002, 55, 8*, International Journal for Numerical Methods in Engineering*, 947-971

6. "Discrete singular convolution and its application to the analysis of plates with internal supports. Part 1: Theory and algorithm", by GW WEI, Yibao ZHAO, and Y. XIANG, 11/2002, 55, 8*, International Journal for Numerical Methods in Engineering*, 913-946

7. "A novel approach for the analysis of high frequency vibrations", by GW WEI, Yibao ZHAO, and Y. XIANG, 10/2002, 257, 2*, Journal of Sound and Vibration*, 207-246

8. "DSC analysis of rectangular plates with non-uniform boundary conditions", by Yibao ZHAO and GW WEI, 08/2002, 255, 2*, Journal of Sound and Vibration*, 203-225

9. "Levy solutions for vibration of multi-span rectangular plates", by Y. XIANG, Yibao ZHAO, and GW WEI, 06/2002, 44, 6*, International Journal of Mechanical Sciences*, 1195-1218

10. "Plate vibration under irregular internal supports", by Yibao ZHAO, GW WEI, and Y. XIANG, 03/2002, 39, 5*, International Journal of Solids and Structures*, 1361-1383

11. "Discrete singular convolution for the prediction of high frequency vibration of plates", by Yibao ZHAO, GW WEI, and Y. XIANG, 01/2002, 39, 1*, International Journal of Solids and Structures*, 65-88

12. "The determination of natural frequencies of rectangular plates with mixed boundary conditions by discrete singular convolution", by GW WEI, Yibao ZHAO, and Y. XIANG, 08/2001, 43, 8*, International Journal of Mechanical Sciences*, 1731-1746

Conference Papers (Refereed)

1. "Laminar entry flow of Herschel-Bulkley fluids in a circular pipe", by R.C GUPTA and Yibao ZHAO, 05/2000, 135-144*, Proceedings of the Third Intl. Conf. on the Advances in Fluid Mechanics*, Montreal, Canada

Working Papers

1. "Hedging Derivative Securities with Volatility Futures: A Discrete-Time epsilon-Arbitrage Approach", by Nelson Kian Leong YAP, Kian Guan LIM, and Yibao ZHAO, 08/2013

Conference Presentations

1. "Hedging Derivative Securities with Volatility Futures: A Discrete-Time epsilon-Arbitrage Approach", by Nelson Kian Leong YAP, Kian Guan LIM, and Yibao ZHAO, 07/2013*, 8th Annual London Business Research Conference*, Imperial Colledge, London, UK

Other Published Articles

1. "Starlet", by Michael BENOLIEL and Yibao ZHAO, Kellogg School of Management, Northwestern University., 2011

Courses Taught - Masters

- August: Prep Course (MATLAB Programming), Master of Quantitative Finance, August 2013 - Now
- Term 3: QF610 Stochastic Calculus, Master of Quantitative Finance, May 2013 - Now
- Term 1: QF601 Numerical Methods I, Master of Quantitative Finance, September 2012 - Now
- Advanced Fixed Income Analysis, Master of Applied Finance (China), August 2008 - December 2008

Courses Taught - Undergraduate

- Term 1 and Term 2: QF205 Computing Technology for Finance, August 2012 - Now
- Term 1: MATH 001 Calculus, 2008 - Now
- Term 1 and Term 2: QF202 Differential Equations, 2007 - Now
- Term 1 and Term 2: (QF202) Labs, January 2007 - April 2012
- Term 1 and Term 2: (QF201) Labs, August 2006 - December 2010
- Term 1: (QF302) Lab, January 2010 - April 2010
- Term 1: (QF302) Labs, August 2007 - December 2007

Teaching Assistance and Tutoring

- Instructor, Math Camp for MSc and PhD (Economics) Students, August 2008
- Instructor, Math Camp for MSc and PhD (Economics) Students, August 2009

Committees

- Member, Committee for Academic Advising, LKCSB, 2009 - Now

Other Services

- SMU Open House
- Interviewer, LKCSB Admission Interviews

Other Activities

- Course Developement of Master of Quatitative Finance Preparation Course (MATLAB) Teaching (2013)
- Course Developement of Master of Quatitative Finance QF610 Teaching (2013)
- Course Developement of Master of Quatitative Finance QF601 Teaching (2012)
- Course Developement of Quatitative Finance QF205 Teaching (2012)
- Course Re-developement of Quantitative Finance QF202 Teaching (2011)
- Course Development of Quantitative Finance MATH001 Teaching (2008)
- Development of Quantitative Finance Software for QF302 Teaching (2007)
- Development of Quantitative Finance Software for QF202 Teaching (2007)
- Development of Quantitative Finance Software Workshop C : Fixed Income Modeling (2006)
- Development of Quantitative Finance Software for QF201 Teaching (2006)
- Course Development of Quantitative Finance QF202 Teaching (2006)