

CURRICULUM VITAE OF ZUOWEI SHEN

Personal

Name: Zuowei Shen
Address: Department of Mathematics
National University of Singapore
Singapore, 119076
Email: matzuows@nus.edu.sg

Education

PhD. 1991, M.Sc. 1987, University of Alberta (Canada)
B.Sc. 1982, Hohai University (China)

Professional Experience

Distinguished Professor 2022-present; 2009-2012
Tan Chin Tuan Centennial Professor 2013-2021
National University of Singapore

Professor 2002-present
Associate Professor; Senior Lecturer; Lecturer 2002-1998-1997-1993
Department of Mathematics, National University of Singapore

Research Associate 1991-1993
Center for the Mathematical Sciences, University of Wisconsin-Madison

Research Interests

Approximation & Wavelet Theory and Applications, Imaging Sciences, Machine Learning.

Distinctions

Non-EU EurASc Member/Fellow, European Academy of Sciences, (2025)
The Public Administration Medal (Silver), Singapore, (2021).
TWAS Fellow, The World Academy of Sciences, (2020).
SIAM Fellow, Society for Industrial and Applied Mathematics, USA, (2019).
AMS Fellow, American Mathematical Society, USA, (2017).
Highly Cited Researcher, Clarivate Analytics (2016, 2017, 2018); Thomson Reuters, (2016).
Invited Speaker, International Congress on Industrial and Applied Mathematics (ICIAM), (2015).
Wavelet Pioneer Award, Society of Photographic Instrumentation Engineers (SPIE), USA, (2012).
Inaugural Fellow, Singapore National Academy of Science, (2011).
Invited Speaker, International Congress of Mathematicians (ICM), (2010).
Outstanding University Researcher Award, the National University of Singapore, (2008); (1997).
National Science Award of Singapore, Singapore, (1998).
Andrew Stewart Graduate Prize for Doctoral Research, the University of Alberta, Canada, (1991).

Member of Editorial Board

Forum of Mathematics, Pi, (2020-); Forum of Mathematics, Sigma, (2020-); SIAM Journal on Mathematical Analysis, (2010-); Multiscale Modeling and Simulation: A SIAM Interdisciplinary Journal, (2009-2020); SIAM Journal on Imaging Sciences, (2015-2017); Mathematics of Computation, (2011-2018); Journal of Approximation Theory, (2001-); Constructive Approximation, (2018-); Applied and Computational Harmonic Analysis, (2007-); Journal of Fourier Analysis and Applications, (2007-); Journal of Machine Learning, (2022-); Inverse Problems and Imaging, (2009-); Chinese Annals of Mathematics, (2021-); CSIAM Transactions on Applied Mathematics, (2020-); Journal of Computational Mathematics, (2007-2017); The Asian Journal of Mathematics, (2015-); East

Asia Journal on Applied Mathematics, (2010-2017); The Springer-Birkhauser Applied and Numerical Harmonic Analysis (ANHA) Book Series, (2010-).

Service

International Community

- Member, TWAS Membership Advisory Committee in Mathematical Sciences, 2025-2026.
- Member, Program committee, the 11th International Congress on Industrial and Applied Mathematics 2027. (ICIAM2027).
- Member, Panel for the Section of Statistics and Data Analysis, International Congress of Mathematician, 2022.
- Member, SIAM Fellows Canvassing Committee, 2020-2021.
- Member, ICIAM Prize Committee for 2019, (ICIAM: the International Council for Industrial and Applied Mathematics).
- Member, Panel for the Section of Mathematics in Science and Technology, International Congress of Mathematician, 2014.

National University of Singapore

- Director, Institute for Mathematical Sciences, 2023-present.
- Vice Provost (Graduate Education & Special Duties), Dean (Graduate School), 2020-2023.
- Dean, Faculty of Science, 2014-2020.
- Interim Director, Institute of Data Science, 2016-2017.
- Head, Department of Mathematics, Faculty of Science, 2012-2014

Selected Recent Talks in Conferences/Workshops

- Plenary Speaker: EASIAM Conference 2024 , Macau, China, 2024
- Plenary Speaker, The Second HKSIAM Biennial Conference , August, 2023, Hong Kong, China.
- Plenary Speaker, Congress of Basic Science, July, 2023, Beijing, China.
- Plenary Speaker, The Seventh International Conference on Scientific Computing and Partial Differential Equations, May 2023, Hong Kong, China.
- Plenary Speaker, Mathematical and Scientific Machine Learning, August, 2022, Beijing, China.
- Plenary Speaker, Neural Networks and Deep Learning, June, 2022, Fields Institute, Canada.
- Invited Speaker, IMA workshop in Mathematical Foundation and Applications of Deep Learning, August, 2021, Purdue, USA.
- Plenary Speaker, The 3rd National Congress on Big Data and AI , July, 2021, Chengdu, China.
- Keynote Speaker, The 4th International Symposium on Image Computing and Digital Medicine, December 2020, Shenyang, China.
- Invited Speaker, Workshop on Mathematical Machine Learning and Applications, December, 2020, the Pennsylvania State University, USA.
- Plenary Speaker, The 18th Conference of the Chinese Society of Industrial and Applied Mathematics (CSIAM), October, 2020, Changsha, China.
- Invited Speaker, The Jubilee of Fourier Analysis and Applications Conference, September, 2019, University of Maryland, USA
- Plenary Speaker, Workshop on Recent Advances on Mathematical Imaging and Data Science, July 2019, Shanghai Jiaotong University, China.
- Invited Speaker, Workshop on Geometry and Learning from Data in 3D and Beyond, April/May, 2019, IPAM, UCLA, USA.
- Invited Speaker, Workshop on Machine Learning for Multiscale Model, March, 2019, Harvard, USA.
- Plenary Speaker, International Conference on Mathematics of Data Science, November 2018, Old Dominion University, USA.
- Invited Speaker, Workshop on New Deep Learning Techniques, February, 2018, IPAM, UCLA, USA.

Talks in Major Conferences Before 2018

- Plenary Speaker, Applied Inverse Problems, (AIP 2017), May, 2017, Hangzhou, China.
- Invited Speaker, the 8th International Congress on Industrial and Applied Mathematics (ICIAM), August, 2015, Beijing, China.
- Plenary Speaker, Asian Mathematical Conference, June, 2013, Busan, South Korean.
- Plenary Speaker, The 9th International Conference on Sampling Theory and Applications, May, 2011, Singapore.
- Invited Speaker, International Congress of Mathematicians (ICM), August, 2010 (Section: Numerical Analysis and Scientific Computing), Hyderabad, India.
- Plenary Speaker, The 11th Biannual Conference of the Chinese Society of Industrial and Applied Mathematics (CSIAM), July, 2010, Chongqing, China.
- Plenary Speaker, The 11th Conference on Computational Mathematics of Chinese Universities, July, 2009, Guiyang, China.