Guanjie Wang (Updated August 3, 2024)

CONTACT INFORMATION

School of Statistics and Mathematics
Shanghai Lixin University of Accounting and Finance
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RESEARCH INTERESTS

Numerical Solution of PDEs, Uncertainty Quantification.

CURRENT POSITION

Associate Professor
Shanghai Lixin University of Accounting and Finance, Shanghai   *Dec. 2023~ Present*

POSITION OCCUPIED

Lecture
Shanghai Lixin University of Accounting and Finance, Shanghai   *Mar. 2020~Dec. 2023*

Research Assistant Professor
ShanghaiTech University, Shanghai   *Apr. 2018~Feb, 2020*

Postdoctoral Fellow
Chinese Academy of Sciences, Shanghai   *Jul. 2015~Mar. 2018*

EDUCATION

Zhejiang University, Hangzhou, Zhejiang, China
Doctor of Philosophy, Computational Mathematics   *Sep.2010 ~ Jun. 2015*

Qufu Normal University, Qufu, Shandong, China
Bachelor of Science, Mathematics and Applied Mathematics   *Sep. 2006~ Jul. 2010*

PUBLICATIONS

Co-first Author, * Corresponding Author.

[1] X. Shi, H. Zhang and **G. Wang** *. ANOVA-GP modeling for high-dimensional Bayesian inverse problems, Mathematics, 12(2), 301, 2024.

[2] **G. Wang**, S. Sahu and Q. Liao. "An adaptive ANOVA stochastic Galerkin method for partial differential equations with high-dimensional random inputs", *Journal of Scientific Computing*, **98** (1), 24, 2024.

[3] **G. Wang** and Q. Liao. "Reduced basis Galerkin method for partial differential equations with random inputs", *Applied Mathematics and Computation*, **463**, 128375, 2024.

[4] M. Li, Y. Feng and **G. Wang** *. "Estimating failure probability with neural operator hybrid approach", *Mathematics*, **11**(12), 2762, 2023.

[5] **G. Wang**, F. Xue and Q. Liao. "Localized stochastic Galerkin methods for Helmholtz problems close to resonance", *International Journal for Uncertainty Quantification*, **11**(5), 77-99, 2021.

[6] Q. Huang, K. Li, **G. Wang** and X. Du. "Stochastic finite element methods with the Euclidean degree for partial differential equations with random inputs", *2020 Chinese Control And Decision Conference (CCDC), Hefei, China*, 634-640, 2020.

[7] **G. Wang** and Q. Liao. "An adaptive hybrid spectral method for stochastic Helmholtz problems", *Numerical Mathematics: Theory, Methods and Applications*, **13**(4), 1007-1026, 2020.

[8] **G. Wang** and Q. Liao. "Efficient spectral stochastic finite element methods for Helmholtz equations with random inputs", *East Asian Journal on Applied Mathematics*, **9**(3), 601-621, 2019.

[9] J. Zhu and **G. Wang**. "Fast computation of wave propagation in the open acoustical waveguide with a curved interface", *Wave motion*, **57**, 171-181, 2015.

[10] J. Zhu and **G. Wang**. "New computational treatment of optical wave propagation in lossy waveguides", *Frontiers of Information Technology & Electronic Engineering*, **16**(8), 646-653, 2015.

[11] J. Zhu and **G. Wang**. "High-precision computation of optical propagation in inhomogeneous waveguides", *Journal of the Optical Society of America A*, **32**(9), 1653-1660, 2015.

TEACHING EXPERIENCE

1. At the School of Statistics and Mathematics, Shanghai Lixin University of Accounting and Finance, since 2020. Courses Taught:

   (1) Linear Algebra (EM), spring 2022-2023, 2023-2024;
   (2) Advanced Mathematics (B)-calculus I, fall 2021-2022, 2022-2023, 2023-2024, 2024-2025;
   (3) Advanced Mathematics (B)-calculus II, spring 2021-2022, 2022-2023, 2023-2024;
   (4) Probability and Mathematical Statistics (EM), fall 2021-2022, 2022-2023; spring 2019-2020, 2020-2021.

2. At the School of Information Science and Technology, ShanghaiTech University, teaching assist for:

   (1) Numerical methods for partial differential equations (postgraduate), fall 2018-2019;
   (2) Linear Algebra (undergraduate), fall 2015-2016.

3. At the International College, Zhejiang University, teaching assistant for:

   (1) Introduction to Calculus I (oversea students), fall 2012-1013, 2013-2014;
   (2) Introduction to Linear Algebra (oversea students), spring 2012-1013, 2013-2014.

4. At the department of mathematics, Zhejiang University, teaching assistant for:

   (1) Linear Algebra, Advanced Algebra, 2013/03-2014/01.

ACADEMIC CONFERENCES

I have attended the following conferences and workshops:

1. "An adaptive ANOVA stochastic Galerkin method for partial differential equations with random inputs", *CSIAM-UQ 2023*, 20–21, May, 2023, Yantai, China.

2. "Reduced basis Galerkin method for partial differential equations with random inputs", *CSIAM 2019*, 19–22, September, 2019, Foshan, China, (contributed talk).

3. *Mathematics Science Forum Based on Material Movement Cognition*, 18–20 May 2019. East China Normal University, Shanghai, China.

4. *CSIAM 2017*, 13–15, October, 2017, Qingdao, China.

5. *International Summer School on Scientific Computing*, 24 July – 5 August, 2017, Beijing, China.

6. *10th Annual Conference*; *Computational mathematics*; *China Society for Computational Mathematics*, 19–21 September, 2015, Guangzhou, China.

COMPUTER SKILLS

Linux, Matlab, LaTeX , html, etc.