

EDUCATION

- **Missouri University of Science and Technology** Rolla, MO
Ph.D. Candidate in Computational and Applied Mathematics; Aug. 2021– May. 2026
- **Tongji University** Shanghai, China
Master of Management in Management Science and Engineering; Sep. 2016 – Mar. 2019
- **Beijing University of Civil Engineering and Architecture** Beijing, China
Bachelor of Management in Engineering Management; Sep. 2011 – Jul. 2015

RESEARCH PROJECT

- **Surrogate Modeling in PDE via neural network:**
Designed convolution-based reduced-order surrogate models for nonlocal and classical parametric PDEs (2024–2025).
Building ROM frameworks independent of spatial discretization for parametric PDEs (2025)
- **Operator learning in solving PDE:**
Developing geometry-aware neural operators to solve PDEs on irregular domains, improving generalization across heterogeneous meshes (in progress).
- **Foundation models:**
Constructing a ViT-based foundation model to accelerate Physics-Informed Neural Networks for PDEs (2025).
- **Generative models in solving PDE:**
Applied generative models (GAN, VAE) to learn PDE solution distributions from a probability perspective (2022).

INDUSTRIAL EXPERIENCE

- **Berkeley Lawrence National Lab** Berkeley, CA
Summer intern Jun. 2024 – Aug. 2024
 - **Generative models:** Building generative model (VAE, GAN, Diffusion Model) in developing new catalyst.
- **Beijing One Zero Wave Technology Co., Ltd.** Beijing, China
Data Analyst Mar. 2020 – Apr. 2021
 - **Data analysis:** Performing data analysis and designing risk schemes for oversea loans.
- **FinSight Lab, Beijing Fantaike Technology Co., Ltd.** Beijing, China
Data Analyst Mar. 2019 – Feb. 2020
 - **Data analysis:** Building and updating application score card model. Performing data mining and other machine learning models for business, such as time-series prediction models and classification models.

PUBLICATIONS

- *Parametric model reduction with convolutional neural networks*, Y. Wang, S. Zhou, and Y. Zhang, International Journal of Numerical Analysis and Modeling, 21(5):716–738, 2024.
- *Parametric model reduction with convolutional neural networks*, Y. Wang, S. Zhou, and Y. Zhang, Computer Methods in Applied Mechanics and Engineering.
- *Research on the classification of grants based on data mining and random forest algorithm*, Y. Wang, X. Wu and Y. Luo, Appl. Math. Chinese Market 03(2019), pp. 50–52.

SKILLS

- **Programming** Python(TensorFlow, PyTorch), MATLAB, SQL, git, Tableau and L^AT_EX, C, Linux.
- **Technologies** Specialized in Scientific computing, AIforPDE