Jiequn Han

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Work Experience

Research Scientist, Center for Computational Mathematics, Flatiron Institute, 2023–present

Flatiron Research Fellow, Center for Computational Mathematics, Flatiron Institute, 2021–2023

Instructor of Mathematics, Department of Mathematics, Princeton University, 2018–2021

Research Intern, Google DeepMind, UK, Jun.–Sep., 2017

Education

Ph.D. Applied Mathematics, Princeton University, USA, 2013–2018

B.S. Major in Mathematics and Minor in Economics, Peking University, China, 2009–2013

Research Interests

Learning-based algorithms for scientific computing

Numerical methods for partial differential equations, optimal control, and inverse problems

Multiscale problems in computational physics & chemistry

Mathematical finance, multi-agent system and mean field game theory

Awards

SIAM Computational Science and Engineering (CSE) Early Career Prize, 2025 (awarded biennially to one scholar)

IOP Publishing Top Cited Paper Award North America, 2024

Frontiers of Science Award, the International Congress of Basic Science (ICBS), 2024

C.V. Starr Fellowship, Princeton University, 2014

Academic Excellence Award, Peking University, 2011 & 2012

President Research Fund, Peking University, 2011–2012

Refereed Publications

1. R Morel, J Han, and, E. Oyallon, DISCO: learning to DISCover an evolution Operator for multi-physics-agnostic prediction, *accepted to International Conference on Machine Learning (ICML)*, (2025).
2. W. Hu, Y. Zhao, W. E, J. Han, and J. Long, Learning free terminal time optimal closed-loop control of manipulators, *accepted to American Control Conference (ACC)*, (2025).
3. X.-H. Zhou, J. Han, M. I. Zafar, C. J. Roy, and H. Xiao, Neural operator-based super-fidelity: A warm-start approach for accelerating steady-state simulations, *Journal of Computational Physics*, 529, 113871 (2025).

4. W. Hu, J. Long, Y. Zang, W. E, and J. Han, Solving optimal control problems of rigid-body dynamics with collisions using the hybrid minimum principle, *Communications in Nonlinear Science and Numerical Simulation*, 143, 108603 (2025).

5. J. Bruna, J. Han, Provable posterior sampling with denoising oracles via tilted transport, *Conference on Neural Information Processing Systems (NeurIPS)*, (2024).

6. C. Domingo-Enrich, J. Han, B. Amos, J. Bruna, and R. T. Q. Chen, Stochastic optimal control matching, *Conference on Neural Information Processing Systems (NeurIPS)*, (2024).

7. Y. Zhao and J. Han, Offline supervised learning vs. online direct policy optimization: A comparative study and a unified training paradigm for neural network-based optimal feedback control, *Physica D: Nonlinear Phenomena*, 462, 134130 (2024).

8. X. Guo, J. Han, M. Tajrobehkar, and W. Tang, Escaping saddle points efficiently with occupation-time-adapted perturbations, *Journal of Computational Mathematics and Data Science*, 10, 100090 (2024).

9. J. Han, R. Hu, and J. Long, Learning high-dimensional McKean-Vlasov forward-backward stochastic differential equations with general distribution dependence, *SIAM Journal on Numerical Analysis*, 62(1) 1–24 (2024).

10. J. Guo, T. Gao, P. Zhang, J. Han and J. Duan, Deep reinforcement learning in finite-horizon to explore the most probable transition pathway, *Physica D: Nonlinear Phenomena*, 458, 133955 (2024).

11. J. Han, R. Hu, and J. Long, A class of dimensionality-free metrics for the convergence of empirical measures, *Stochastic Processes and their Applications*, 164, 242–287 (2023).

12. J. Zeng, D. Zhang, and 45 others, including J. Han, DeePMD-kit v2: A software package for Deep Potential models, *Journal of Chemical Physics*, 159, 054801 (2023).

13. J. Long and J. Han, Reinforcement learning with function approximation: from linear to nonlinear, *Journal of Machine Learning*, , 2(3), 161–193 (2023).

14. M. Zhou, J. Han, M. Rachh, and C. Borges, A neural network warm-start approach for the inverse acoustic obstacle scattering problem, *Journal of Computational Physics*, 490, 112341 (2023).

15. Y. D. Zhong, J. Han, B. Dey, and G. O. Brikis, Improving gradient computation for differentiable physics simulation with contacts, *Annual Learning for Dynamics & Control Conference (L4DC)*, (2023).

16. J. Han, X.-H. Zhou, and H. Xiao, An equivariant neural operator for developing nonlocal tensorial constitutive models, *Journal of Computational Physics*, 488, 112243 (2023).

17. W. E, J. Han, and Q. Li, Dynamical systems and optimal control approach to deep learning, *Mathematical Aspects of Deep Learning*, Cambridge University Press, 422–438 (2022).

18. R. Xu, X.-H. Zhou, J. Han, R. P. Dwight, and H. Xiao, A PDE-free, neural network-based eddy viscosity model coupled with RANS equations, *International Journal of Heat and Fluid Flow*, 98, 109051 (2022).

19. W. E, J. Han, and J. Long, Empowering optimal control with machine learning: A perspective from model predictive control, *25th International Symposium on Mathematical Theory of Networks and Systems (MTNS)*, (2022).

20. Y. Xuan, R. Balkin, J. Han, R. Hu, and H. D. Ceniceros, Pandemic control, game theory and machine learning, *Notices of the American Mathematical Society*, 69(11), 1878–1887 (2022).

21. Y. Zang, J. Long, X. Zhang, W. Hu, W. E, and J. Han, A machine learning enhanced algorithm for the optimal landing problem, *Mathematical and Scientific Machine Learning Conference (MSML)*, (2022).

22. Y. D. Zhong, J. Han, and G. O. Brikis, Differentiable physics simulations with contacts: Do they have correct gradients w.r.t. position, velocity and control? AI4Science Workshop, *International Conference on Machine Learning (ICML)*, (2022).

23. M. I. Zafar, J. Han, X.-H. Zhou, and H. Xiao, Frame invariance and scalability of neural operators for partial differential equations, Communications in Computational Physics, 32, 336–363 (2022).

24. G. Pescia, J. Han, A. Lovato, J. Lu, and G. Carleo, Neural-network quantum states for periodic systems in continuous space, *Physical Review Research*, 4, 023138 (2022).

25. J. Han, R. Hu, and J. Long, Convergence of deep fictitious play for stochastic differential games, *Frontiers of Mathematical Finance*, 1(2), 287–319 (2022).

26. J. Long and J. Han, Perturbational complexity by distribution mismatch: A systematic analysis of reinforcement learning in reproducing kernel Hilbert space, *Journal of Machine Learning*, 1(1), 1–37 (2022).

27. J. Han, Y. Li, L. Lin, J. Lu, J. Zhang, and L. Zhang, Universal approximation of symmetric and anti-symmetric functions, *Communications in Mathematical Sciences*, 20(5), 1397–1408 (2022).

28. J. Long, J. Han, and W. E, An L^2 analysis of reinforcement learning in high dimensions with kernel and neural network approximation, *CSIAM Transactions on Applied Mathematics*, 3(2), 191–220 (2022).

29. Z. Li, J. Han, W. E, and Q. Li, Approximation and Optimization Theory for Linear Continuous-Time Recurrent Neural Networks, *Journal of Machine Learning Research*, 23(42), 1–85 (2022).

30. W. E, J. Han, and A. Jentzen, Algorithms for solving high dimensional PDEs: from nonlinear Monte Carlo to machine learning, *Nonlinearity*, 35(1), 278–310 (2022).

31. X.-H. Zhou, J. Han, and H. Xiao, Frame-independent vector-cloud neural network for nonlocal constitutive modelling on arbitrary grids, *Computer Methods in Applied Mechanics and Engineering*, 388, 114211 (2022).

32. Y. Achdou, J. Han, J.M. Lasry, P.L. Lions, and B. Moll, Income and wealth distribution in macroeconomics: A continuous-time approach, *The Review of Economic Studies*, 89(1), 45–86 (2022).

33. M. Zhou, J. Han, and J. Lu, Actor-critic method for high dimensional static Hamilton–Jacobi–Bellman partial differential equations based on neural networks, *SIAM Journal on Scientific Computing*, 43(6), A4043–A4066 (2021).

34. Y. Xuan, R. Balkin, J. Han, R. Hu, and H. D. Ceniceros, Optimal policies for a pandemic: A stochastic game approach and a deep learning algorithm, *Mathematical and Scientific Machine Learning Conference (MSML)*, (2021).

35. J. Han and R. Hu, Recurrent neural networks for stochastic control problems with delay, *Mathematics of Control, Signals, and Systems*, 33, 775–795 (2021).

36. W. Wang, J. Han, Z. Yang, and Z. Wang, Global convergence of policy gradient for linear-quadratic mean-field control/game in continuous time, *International Conference on Machine Learning (ICML)*, (2021).

37. X.-H. Zhou, J. Han, and H. Xiao, Learning nonlocal constitutive models with neural networks, *Computer Methods in Applied Mechanics and Engineering*, 384, 113927 (2021).

38. W. E, J. Han, and L. Zhang, Machine-learning-assisted modeling, *Physics Today*, 74, 7, 36 (2021).

39. Z. Li, J. Han, W. E, and Q. Li, On the curse of memory in recurrent neural networks: approximation and optimization analysis, *International Conference on Learning Representations (ICLR)*, (2021).

40. J.B. Scoggins, J. Han, and M. Massot, Machine learning moment closures for accurate and efficient simulation of polydisperse evaporating sprays, *AIAA Scitech 2021 Forum*, 1786 (2021).

41. J. Han, J. Lu, and M. Zhou, Solving high-dimensional eigenvalue problems using deep neural networks: A diffusion Monte Carlo like approach, *Journal of Computational Physics*, 423, 109792 (2020).

42. J. Han and R. Hu, Deep fictitious play for finding Markovian Nash equilibrium in multi-agent games, *Mathematical and Scientific Machine Learning Conference (MSML)*, (2020).

43. J. Han and J. Long, Convergence of the deep BSDE method for coupled FBSDEs, *Probability,Uncertainty and Quantitative Risk*, 5(1), 1–33 (2020).

44. J. Han, C. Ma, Z. Ma and W. E, Uniformly accurate machine learning-based hydrodynamic models for kinetic equations, *Proceedings of the National Academy of Sciences*, 116(44) 21983–21991 (2019).

45. J. Han, L. Zhang, and W. E, Solving many-electron Schrödinger equation using deep neural networks, *Journal of Computational Physics*, 399, 108929 (2019).

46. W. E, J. Han, and Q. Li, A mean-field optimal control formulation of deep learning, *Research in the Mathematical Sciences*, 6:10 (2019).

47. L. Zhang, J. Han, H. Wang, W. Saidi, R. Car, and W. E, End-to-end symmetry preserving inter-atomic potential energy model for finite and extended systems, *Conference on Neural Information Processing Systems (NeurIPS)*, (2018).

48. J. Han, A. Jentzen, and W. E, Solving high-dimensional partial differential equations using deep learning, *Proceedings of the National Academy of Sciences*, 115(34), 8505–8510 (2018).

49. L. Zhang, J. Han, H. Wang, R. Car, and W. E, DeePCG: constructing coarse-grained models via deep neural networks, *The Journal of Chemical Physics*, 149, 034101 (2018).

50. H. Wang, L. Zhang, J. Han, and W. E, DeePMD-kit: A deep learning package for many-body potential energy representation and molecular dynamics, *Computer Physics Communications*, 228, 178–184 (2018).

51. L. Zhang, J. Han, H. Wang, R. Car, and W. E, Deep Potential Molecular Dynamics: a scalable model with the accuracy of quantum mechanics, *Physical Review Letters*, 120(10), 143001 (2018).

52. J. Han, L. Zhang, R. Car, and W. E, Deep Potential: a general representation of a many-body potential energy surface, *Communications in Computational Physics*, 23, 629–639 (2018).

53. W. E, J. Han, and A. Jentzen, Deep learning-based numerical methods for high-dimensional parabolic partial differential equations and backward stochastic differential equations, *Communications in Mathematics and Statistics* 5, 349–380 (2017).

54. J. Han and W. E, Deep learning approximation for stochastic control problems, Deep Reinforcement Learning Workshop, *Conference on Neural Information Processing Systems (NIPS)*, (2016).

55. J. Han, Y. Luo, W. Wang, P. Zhang, and Z. Zhang, From microscopic theory to macroscopic theory: a systematic study on modeling for liquid crystals, *Archive for Rational Mechanics and Analysis*, 215(3), 741–809 (2015).

Preprints

1. J. Han, W. Hu, J. Long, and Y. Zhao, Deep Picard iteration for high-dimensional nonlinear PDEs, *arXiv:2409.08526*.

2. X. Zhang, J. Long, W. Hu, W. E, and J. Han, Initial value problem enhanced sampling for closed-loop optimal control design with deep neural networks, *arXiv:2209.04078*.

3. J. Han, Y. Yang, and W. E, DeepHAM: A global solution method for heterogeneous agent models with aggregate shocks, *arXiv:2112.14377*.

Seminar Talks

Mathematics of Machine Learning Seminar, University of Massachusetts Amherst, Amherst, May. 2025

Computational and Applied Mathematics Colloquium, The Pennsylvania State University, University Park, Sep. 2024

Center for Computational and Applied Mathematics Seminar, Purdue University, West Lafayette, Apr. 2024

Applied & Computational Mathematics Seminar, National University of Singapore, Singapore, Feb. 2024

Scientific Computing and Numerics Seminar, Cornell University, Ithaca, Feb. 2024

Distinguished Lectures in Quantitative Finance, The Chinese University of Hong Kong (virtual), Dec. 2023

Applied Mathematics Colloquium, Columbia University, New York, Oct. 2023

Applied Math and Analysis Seminar, Duke University, Durham, Oct. 2023

Seminar on Applied Mathematics, The Hong Kong Polytechnic University, Hong Kong, China, Sep. 2023

Seminar on Industrial Engineering and Decision Analytics, Hong Kong University of Science and Technology, Hong Kong, China, Sep. 2023

Seminar on Applied Mathematics, Hong Kong University of Science and Technology, Hong Kong, China, Aug. 2023

The Hong Kong - Singapore Joint Seminar Series in Financial Mathematics/Engineering (virtual), Apr. 2023

BIMSA-Tsinghua Seminar on Machine Learning and Differential Equations (virtual), Dec. 2022

Finance Department Seminar, Tsinghua University School of Economics and Management (virtual), Dec. 2022

AI + Math Colloquia, Shanghai Jiao Tong University (virtual), Nov. 2022

Control and Optimisation seminar, Imperial College (virtual), May. 2022

Macroeconomics Workshop, Peking University (virtual), Feb. 2022

Applied Math Seminar, George Washington University (virtual), Dec. 2021

School of Data Science Seminar, City University of Hong Kong (virtual), Nov. 2021

Seminar on Mathematics of Deep Learning, Flatiron Institute, New York, Nov. 2021

Stochastic Seminar, Brandenburg University of Technology (virtual), Jul. 2021

Control and Optimization Seminar, University of Connecticut (virtual), Apr. 2021

Mathematics in Imaging, Data and Optimization Seminar, Rensselaer Polytechnic Institute (virtual), Mar. 2021

CMSE Seminar, Michigan State University (virtual), Mar. 2021

CSE Seminar, Georgia Institute of Technology (virtual), Jan. 2021

Probability Seminar, University of Duisburg-Essen (virtual), Dec. 2020

Seminar on Stochastic Analysis, Statistics and Machine Learning, Linnaeus University (virtual), Nov. 2020

Applied Math Seminar, University of Georgia (virtual), Nov. 2020

Applied Mathematics Seminar, UC Berkeley/Lawrence Berkeley Laboratory (virtual), Nov. 2020

Applied Mathematics/PDE Seminar, UC Santa Barbara (virtual), Nov. 2020

Applied & Computational Mathematics Seminar, National University of Singapore, Singapore, Jan. 2020

PACM Colloquium, Princeton University, Princeton, Nov. 2019

Clements Scientific Computing Seminar, Southern Methodist University, Dallas, Sep. 2019

Applied Mathematics Seminar, UC Berkeley/Lawrence Berkeley Laboratory, Berkeley, Sep. 2019

LSEC Seminar, Chinese Academy of Sciences, Beijing, China, Jul. 2019

Mathematics in Interaction with Computer Science Seminar, CentraleSupélec, Palaiseau, France, Jun. 2019

Applied Math Seminar, Center for Applied Mathematics, École Polytechnique, Gif-sur-Yvette, France, Jun. 2019

Smith Colloquium in Department of Mathematics, University of Kansas, Lawrence, May 2019

Financial Mathematics Seminar, University of Michigan, Ann Arbor, Mar. 2019

Applied Math and Analysis Seminar, Duke University, Durham, Oct. 2018

LSEC Seminar, Chinese Academy of Sciences, Beijing, China, Aug. 2018

Computational and Applied Math Seminar, Peking University, Beijing, China, Jul. 2018

Conference Presentations

SIAM Computational Science and Engineering (CSE) Early Career Prize Lecture, SIAM CSE25, Fort Worth, Mar. 2025

Learning on Graphs Conference NYC meetup, Jersey City, Nov. 2024

Workshop on Data-Driven PDE-Based Inverse Problem, University of Wisconsin, Madison, Aug. 2024

Lecture on Frontiers of Science Award, the International Congress of Basic Science (ICBS), Beijing, China, Jul. 2024

Fourth Symposium on Machine Learning and Dynamical Systems, Fields Institute, Toronto, Canada, Jul. 2024

Workshop on Scientific Machine Learning for Simulation and Inverse Modelling, KTH Royal Institute of Technology, Stockholm, Sweden, Jun. 2024

AMS Special Session on Recent Advances in Numerical PDE Solvers by Deep Learning, AMS Spring Central Sectional Meeting, University of Wisconsin-Milwaukee, Milwaukee, Apr. 2024

Brin MRS Workshop on Scientific Machine Learning: Theory and Algorithms, University of Maryland, College Park, Feb. 2024

IMS Young Mathematical Scientists Forum Applied Mathematics, National University of Singapore, Singapore, Jan. 2024

SIAM Minisymposium on Recent Advances in Scientific Computing and Data Science, SIAM-NNP, New Jersey Institute of Technology, Newark, Oct. 2023

Minisymposium on Efficient Numerical Methods for High-Dimensional PDEs, ICIAM 2023, Tokyo, Japan, Aug. 2023

Workshop on New Frontiers in Learning, Control, and Dynamical Systems, ICML 2023, Hawaii, Jul. 2023

CBMS Conference: Deep Learning and Numerical PDEs, Baltimore, Jun. 2023

Workshop on Random Dynamical Systems, Tianyuan Mathematical Center in Central China (virtual), Jun. 2023

Workshop on Stochastic Computation, 2023 Foundations of Computational Mathematics, Paris, France, Jun. 2023

18th Annual Conference on Frontiers in Applied and Computational Mathematics, New Jersey Institute of Technology, Newark, May 2023

Inaugural Center for Approximation and Mathematical Data Analytics (CAMDA) Conference, Texas A&M University, College Station, May 2023

4th AFOSR Monterey Workshop on Computational Nonlinear Control, Monterey, May 2023

Workshop on Machine Learning and Its Applications, Institute for Mathematical Sciences, National University of Singapore (virtual), Oct. 2022

Conference on Frontiers in Machine Learning and Economics: Methods and Applications, Federal Reserve Bank of Philadelphia, Philadelphia, Oct. 2022

Session on Learning-Based Methods in Control, 25th International Symposium on Mathematical Theory of Networks and Systems (virtual), Sep. 2022

2nd AI for Science Workshop, ICML 2022, Baltimore, Jul. 2022

Challenges and Prospects of ML for the Physical Sciences, Flatiron Institute, New York, Jun. 2022

Session on Application of AI & Data Sciense in Macro, Annual Conference of the Canadian Economics Association (virtual), May 2022

Session on Model Solution Methods, Theories and Methods in Macroeconomics (virtual), Apr. 2022

AMS Special Session on Modeling and Forecasting Complex Turbulent Systems, AMS Spring Central Sectional Meeting (virtual), Mar. 2022

Workshop on Deep Learning and Partial Differential Equations, Isaac Newton Institute for Mathematical Sciences (virtual), Nov. 2021

Flatiron-wide Algorithms and Mathematics (FWAM), Flatiron Institute, New York, Oct. 2021

SIAM Minisymposium on Numerical Methods and Deep Learning for Nonlinear PDEs, SIAM SEAS21 (virtual), Sep 2021

Workshop on Machine Learning and Scientific Computing, Tianyuan Mathematical Center in Central China (virtual), Aug. 2021

Minisymposium on Probabilistic Methods for Systems Identification Under Uncertainty, 16th U.S. National Congress on Computational Mechanics (virtual), Jul. 2021

SIAM Minisymposium on the Intersection of Optimal Control and Machine Learning, SIAM CT21 (virtual), Jul. 2021

SIAM Minisymposium on Deep Learning for High-Dimensional Parametric PDEs, SIAM AN20 (virtual), Jul. 2021

SIAM Minisymposium on Machine Learning for Interatomic Potentials, SIAM MS21 (virtual), May 2021

Miniworkshop: Analysis of Data-driven Optimal Control, Mathematical Research Institute of Oberwolfach (virtual), May 2021

SIAM Minisymposium on Physics Informed Learning for Modeling and Discovery of Complex Systems, SIAM CSE21 (virtual), Mar. 2021

Frontiers in Computing + Mathematical Sciences, California Institute of Technology (virtual), Jan. 2021

Session on the Intersection of Machine Learning, Control and Games, INFORMS 2020 (virtual), Nov. 2020

Workshop on Computation and Applications of PDEs Based on Machine Learning, Tianyuan Mathematical Center in Northeast China (virtual), Jul. 2020

SIAM Minisymposium on the Intersection of Optimal Control and Machine Learning, SIAM AN20 (virtual), Jul. 2020

SIAM Minisymposium on Mathematical Issues of Machine Learning, SIAM MDS20 (virtual), Jun. 2020

SIAM Minisymposium on Applications of Machine Learning to the Analysis of Nonlinear Dynamical Systems, JMM 2020, Denver, Jan. 2020

Session on From Stochastic Control to Data-Driven Decision Making, INFORMS 2019, Seattle, Oct. 2019

AIM Workshop on Deep Learning and Partial Differential Equations, San Jose, Oct. 2019

The 2nd National Congress of Big Data and Artificial Intelligence, Kunming, China, Jul. 2019

Computational Mathematics for Model Reduction and Predictive Modelling in Molecular and Complex Systems, EPFL, Lausanne, Switzerland, May 2019

Dimension Reduction in Physical and Data Sciences, Duke University, Durham, Apr. 2019

SIAM Minisymposium on Mathematical Advances in Deep Learning, SIAM CSE19, Spokane, Feb. 2019

AMS Special Session on Financial Mathematics, Joint Mathematics Meetings, Baltimore, Jan. 2019

Mathematical Analysis and Computation for Quantum Systems, Peking University, Beijing, China, Jan. 2019

International Conference on Data Science, Fudan University, Shanghai, China, Dec. 2018

New Faculty Talks, Princeton University, Princeton, Oct. 2018

Machine Learning Theory Workshop, BICMR, Beijing, China, Jun. 2018

Stochastic Control, Computational Methods, and Applications, IMA, Minneapolis, May 2018

Workshop on Learning, Modeling and Simulation, Princeton University, Princeton, Feb. 2018

Inverse Problems and Machine Learning, California Institute of Technology, Pasadena, Feb. 2018

Service

Editorial board

Associate Editor, Inverse Problems and Imaging (IPI), 2025–present

Associate Editor, SIAM Journal on Scientific Computing (SISC), 2025–present

Associate Editor, Journal of Machine Learning (JML), 2022–present

Associate Editor, SeMA Journal: Bulletin of the Spanish Society of Applied Mathematics, 2021–present

Co-organizer (with Qianxiao Li and Xiang Zhou), Minisymposium on the Intersection of Machine Learning, Dynamical Systems and Control, ICIAM 2023, Tokyo, Aug. 2023

Co-organizer (with Weinane E, Qi Gong, and Wei Kang), Minisymposium on the Intersection of Optimal Control and Machine Learning, SIAM CT21 (virtual), July 2021

Co-organizer (with Qi Gong and Wei Kang), Minisymposium on the Intersection of Optimal Control and Machine Learning, SIAM AN20 (virtual), July 2020

Area chair for ICLR

Referee for

Proc. Natl. Acad. Sci. U.S.A., SIAM J. Numer. Anal., SIAM J. Sci. Comput., SIAM J. Contr. Optim., Commun. Pure Appl. Math., Found. Comput. Math., Appl. Comput. Harmon. Anal. Ann. Appl. Probab. IMA J. Numer. Anal., J. Comput. Phys., J. Sci. Comput., Phys. Fluid, Comput. Methods Appl. Mech. Eng., Physica D, Commun. Math. Sci., Commun. Comput. Phys., Res. Math. Sci., NeurIPS, J. Mach. Learn. Res., Neural. Comput., Math. Financ., Manage. Sci., Stoch. Syst., among many others.

Teaching

APC 350, Introduction to Differential Equations, Princeton University, Spring 2019, Spring 2020, Spring 2021

MAT 201, Multivariable Calculus, Princeton University, Fall 2018, Fall 2019, Fall 2020

Mathematical Introduction to Machine Learning, Applied Mathematics Summer School, Peking University, Aug 2018

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