

Yiming Xu

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Education

- 2017–2022 **Ph.D. in Mathematics** (expected), University of Utah, Salt Lake City, US.
- 2012–2016 **B.S. in Mathematics**, Sichuan University, Chengdu, China.
- 2016 **Visiting Student**, St Edmund Hall, University of Oxford, Oxford, UK.

Research Interest

- Statistical machine learning • Data assimilation & uncertainty quantification • Applied probability

Preprints & Publications

- 1 Randomized least squares with general distributional data (with T. Alberts and A. Narayan), *preprint*.
- 2 Budget-limited distribution learning in multifidelity problems (with A. Narayan), arXiv: 2105.04599, *submitted (2021)*.
- 3 A bandit-learning approach to multifidelity approximation (with V. Keshavarzzadeh, R.M. Kirby and A. Narayan), arXiv: 2103.15342, *submitted (2021)*.
- 4 Randomized weakly admissible meshes (with A. Narayan), arXiv: 2101.04043, *submitted (2021)*.
- 5 A general pairwise comparison model for extremely sparse networks (with R. Han and K. Chen), arXiv:2002.08853, *submitted (2020)*.
- 6 Analysis of the ratio of ℓ_1 and ℓ_2 norms in compressed sensing (with A. Narayan, H. Tran and C. Webster), arXiv:2004.05873, *revised to Applied and Computational Harmonic Analysis*.
- 7 Consistency of archetypal analysis (with B. Oosting, D. Wang and D. Zosso), *SIAM Journal on Mathematics of Data Science* 3 (2021), no. 1, 1-30.

Awards

- 2021 T. Benny and Gail T. Rushing Award, Department of Mathematics, University of Utah
- 2020 Outstanding Graduate Student, Department of Mathematics, University of Utah
- 2015 National Scholarship, Sichuan University

Academic Involvement

- 06/2021 Participant, Mathematics of Big Data Summer School, MSRI, Berkeley, CA
- 05-08/2020 ASTRO Internship, ORNL, Oak Ridge, TN (suspended due to Covid-19)
- 07/2019 Participant, Industrial Math/Stat Modeling Workshop, SAMSI, Raleigh, NC
- 06/2018 Participant, Random Matrices Summer School, University of Michigan, Ann Arbor, MI

Talks

- 05/2021 Optimization & Machine learning Seminar, CUHK, Shenzhen
- 03/2021 SIAM CSE21 minisymposium on *Theory and Applications of Graph-based Learning*
- 10/2020 BYU/USU Applied Math/PDE Seminar
- 04/2020 Poster session, Computational Statistics and Data-Driven Models, ICERM

Teaching

Spring 2020 Math 1070-Introduction to Statistical Inference, Instructor, University of Utah
Fall 2019 Math 1070-Introduction to Statistical Inference, Instructor, University of Utah
Summer 2019 Math 1220-Calculus II, Instructor, University of Utah
Spring 2019 Math 1100-Business Calculus, Instructor, University of Utah
Fall 2018 Math 1100-Business Calculus, Instructor, University of Utah
Fall 2017 Math 1320-Engineering Calculus II, TA, University of Utah

Languages

Mandarin (native), English (professional working proficiency).

Skills

R, Python, MATLAB, version control