

CURRICULUM VITAE

SHENGBO WANG

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EDUCATION

Stanford University — Management Science and Engineering (Ph.D. Candidate, 2020-).

- Co-advised by Prof. Peter Glynn and Jose Blanchet.
- Pursuing a Ph.D. in Operations Research with concentration in applied probability.

Cornell University — College of Engineering (Bachelor of Science, 2017-2020).

- Summa cum laude.
- Major: Operations Research (honor program).
- Minor: Applied Mathematics.

HONORS AND AWARDS

- Merrill Presidential Scholar (top 1%), Cornell University, 2020.
- Byron W. Saunders Award, 2020.

CONFERENCE PAPER

A Finite Sample Complexity Bound for Distributionally Robust Q-learning

- Shengbo Wang, Nian Si, Jose Blanchet, Zhengyuan Zhou.
- *Artificial Intelligence and Statistics Conference (AISTATS) 2023*.

Optimal Sample Complexity for Average Reward Markov Decision Processes

- Shengbo Wang, Jose Blanchet, Peter Glynn.
- *International Conference on Learning Representations (ICLR) 2024*.

PREPRINTS

Sample Complexity of Variance-reduced Distributionally Robust Q-learning

- Shengbo Wang, Nian Si, Jose Blanchet, Zhengyuan Zhou.
- Submitted to *Journal of Machine Learning Research (JMLR)*.
- arXiv:2305.18420.

Optimal Sample Complexity of Reinforcement Learning for Mixing Discounted Markov Decision Processes

- Shengbo Wang, Jose Blanchet, Peter Glynn.
- arXiv:2302.07477.

On the Foundation of Distributionally Robust Reinforcement Learning

- Shengbo Wang, Nian Si, Jose Blanchet, Zhengyuan Zhou.
- Submitted to *Operations Research*
- arXiv:2311.09018.

Derivative Estimation for Expectations of Additive Functionals of Jump Diffusions

- Shengbo Wang, Jose Blanchet, Peter Glynn.
- Working Paper.

Exact Exponential Tail Asymptotics of Markov Chain Additive Functionals Stopped at a Hitting Time

- Shengbo Wang, Jose Blanchet, Peter Glynn.
- Working Paper.

PRESENTATIONS

Reinforcement Learning for Mixing Systems

- Presented at INFORMS 2023.

Distributionally Robust Q-learning: Formulations, Algorithms, and Sample Complexities

- Presented at SIAMOP 2023.

Distributionally Robust Q-learning: Algorithm Designs and Sample Complexities

- Presented at Stanford OR Seminar.

A Finite Sample Complexity Bound for the Distributionally Robust Q-learning

- Presented at INFORMS 2022.

PROFESSIONAL SERVICES

- Journal reviewer for *Mathematics of Operations Research* and *Management Science*.
- Conference reviewer for *Artificial Intelligence and Statistics (AISTATS)*.