CURRICULUM VITAE

**SHENGBO WANG**

735 Campus Dr, Stanford, CA

607-379-4806 | shengbo.wang@stanford.edu

**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**

**Optimal Sample Complexity for Average Reward Markov Decision Processes**

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

**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.*

**PREPRINTS**

**Statistical Learning of Distributionally Robust Stochastic Control in Continuous State Spaces**

* Shengbo Wang, Nian Si, Jose Blanchet, Zhengyuan Zhou.
* arXiv:2406.11281.

**On the Foundation of Distributionally Robust Reinforcement Learning**

* Shengbo Wang, Nian Si, Jose Blanchet, Zhengyuan Zhou.
* Under Revision.
* arXiv:2311.09018.

**Sample Complexity of Variance-reduced Distributionally Robust Q-learning**

* Shengbo Wang, Nian Si, Jose Blanchet, Zhengyuan Zhou.
* Under Revision.
* arXiv:2305.18420.

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

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

**An Efficient High-Dimensional Gradient Estimator for Stochastic Differential Equations**

* 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**

**On the Foundation of Distributionally Robust Reinforcement Learning**

* Presented at CISS 2024, Standford, Berkeley Seminars.

**Reinforcement Learning for Mixing Systems**

* Presented at INFORMS 2023.

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

* Presented at SIAMOP 2023.

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

* Poster presentation at AISTATS 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, Operations Research,* and *Management Science*.
* Conference reviewer for *Artificial Intelligence and Statistics (AISTATS).*