

# 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

**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, Stanford, 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)*.