**SHAOCONG MA**

**CONTACT INFORMATION**

**E-mail:** s.ma@utah.edu

**Phone:** (+1) 385-439-4778

**Website:** mshaocong.github.io

**EDUCATION**

**PhD in Electrical and Computer Engineering Sep.2019-Jun. 2023(Expected)**

University of Utah GPA:4.0/4.0

**M.A. in Statistics Sep.2017-Jun. 2019**

University of California, Santa BarbaraGPA: 3.9/4.0

**B.S. in Statistics Sep. 2013-Jun. 2017**

Sichuan University GPA: 3.6/4.0

**PUBLICATIONS**

**Shaocong Ma**, Yi Zhou. *Understanding the Impact of Model Incoherence on Convergence of Incremental SGD with Random Reshuffle.* *ICML*. 2020. (Acceptance rate: 21.8%)

**Shaocong Ma**, Yi Zhou, Shaofeng Zou. *Variance-Reduced Off-Policy TDC Learning: Non-Asymptotic Convergence Analysis. NeurIPS. 2020.* (Acceptance rate: 20.1%)

**Shaocong Ma**, Ziyi Chen, Yi Zhou, Shaofeng Zou. *Greedy-GQ with Variance Reduction: Finite-time Analysis and Improved Complexity. ICLR. 2021.* (Acceptance rate: 28.7%)

**PROJECTS**

**How to Improve Sample Complexity of SGD over Highly Dependent Data? A Theoretical Analysis**

* Submitted to ICLR 2022.
* Theoretically explained the influence of data correlation for optimization.
* Built an elegant and efficient optimization method for highly-correlated dataset.

**Sample Efficient Stochastic Policy Extragradient Algorithm for Zero-Sum Markov Game**

* Submitted to ICLR 2022.
* Provided the SOTA complexity result for solving zero-sum Markov game.

**MiniFpsGame: A *gym*-Compatible FPS Game Environment**

* GitHub: <https://github.com/mshaocong/minifpsgame>
* Developed a minimalistic 3D FPS game based on Pyglet (OpenGL 3D graphics).
* Built multiple human-level agents trained with D3QN and PPO as the environment benchmark.

**ACADEMIC SERVICES**

Reviewer: NeurIPS 2021, ICML 2021.

Program Committee: IEEE BigData 2021.

**TEACHING EXPERIENCES**

Statistics; Statistics for Life Science; Statistics for Economics;

Survival Analysis; Actuarial Statistics; Fundamentals of Signals and Systems.