**SHAOCONG MA**

**CONTACT INFORMATION**

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

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**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**

**Self-Supervised Real-Time Object Tracking via Deep Reinforcement Learning**

* GitHub:
* Paper:
* Few-shot learning on highly unbalanced dataset (CHB-MIT Scalp EEG Database)
* Achieved 97.02% accuracy with 56.00% sensitivity.

**Gym-MiniFPSGame: A Gym-Compatible FPS Game Environment**

* GitHub:
* Implemented a Python-based FPS game with goal to kill as many enemies as possible
* Designed and Trained a Double Deep Q-Network with YOLO as a Bounding Box Extractor.
* Achieved better performance than experienced FPS players.

**GARNET Environment**

* GitHub:
* Implemented the Generic Average Reward Nonstationary Environment Testbed (GARNET) to support multi-cores acceleration and large-scale simulations.
* Contributed to the experiments in two top-conference papers: [VRTDC](https://github.com/mshaocong/VRTDC) and [VR-greedy-GQ](https://github.com/mshaocong/VR-greedy-GQ)

**TEACHING EXPERIENCES**

Statistics; Statistics for Life Science; Statistics for Economics;

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