



TMLR Young Scientist SEMINAR

2023 SERIES

Trustworthy Machine Learning and Reasoning Group



Mr. Zhuoning Yuan

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Bate: 07 March 2023 (Tuesday)

① Time: 10:00 – 11:00 (HKT)

Zoom: https://meeting.tencent.com/dm/s7UUX5OzZIOg

LibAUC: A Deep Learning Library for X-Risk Optimization



ABSTRACT

In this talk, I will present our recent development of a deep learning library named LibAUC for optimizing a variety of performance measures, e.g., AUROC, AUPRC, NDCG, which has broad applications in Al including but not limited to imbalanced imaging classification, movie recommendations, and contrastive learning of representations. I will first present some background about X-Risk optimization and then I will use several measures as examples to illustrate this framework. Finally, I will present some empirical studies on several challenging datasets.



BIOGRAPHY

Zhuoning Yuan is a PhD candidate in the Department of Computer Science at the University of Iowa. His research interests primarily focus on developing efficient algorithms for modeling large-scale imbalanced data and improving learning efficiency for self-supervised learning methods. He is the lead of the development of LibAUC. He has published several papers in top-tier AI conferences, including ICML, NeurIPS, ICLR, ICCV, ECCV, KDD. He served as reviewers/PC members for several top-tier conferences/journals, and he also received the Outstanding Reviewer Award in CVPR 2021.