Ayoub El Hanchi

Email: aelhan@cs.toronto.edu
Website: www.cs.toronto.edu/~aelhan
Google scholar: Profile

EDUCATION

Ph.D. Computer Science   2021-Present
Supervisors: Prof. Chris J. Maddison and Prof. Murat A. Erdogdu
University of Toronto, Toronto, ON

M.Sc. Mathematics and Statistics   2019-2021
Supervisor: Prof. David A. Stephens
McGill University, Montreal, QC

B.Sc. Honours Mathematics and Computer Science   2016-2019
McGill University, Montreal, QC

PUBLISHED ARTICLES

1. **El Hanchi, Ayoub**, Chris J. Maddison, and Murat A. Erdogdu. On the Efficiency of ERM in Feature Learning. In Advances in Neural Information Processing Systems, **NeurIPS 2024**.

2. **El Hanchi, Ayoub**, Chris J. Maddison, and Murat A. Erdogdu. Minimax Linear Regression under the Quantile Risk. In Annual Conference on Learning Theory, **COLT 2024**.

3. **El Hanchi, Ayoub**, and Murat A. Erdogdu. Optimal Excess Risk Bounds for Empirical Risk Minimization on p-Norm Linear Regression. In Advances in Neural Information Processing Systems, **NeurIPS 2023**.

4. Johnson, Daniel D., **Ayoub El Hanchi**, and Chris J. Maddison. Contrastive Learning Can Find an Optimal Basis for Approximately View-invariant Functions. In The International Conference on Learning Representations, **ICLR 2023**.

5. **El Hanchi, Ayoub**, David A. Stephens, and Chris J. Maddison. Stochastic Reweighted Gradient Descent. In The International Conference on Machine Learning, **ICML 2022**.

6. **El Hanchi, Ayoub**, and David A. Stephens. Adaptive Importance Sampling for Finite-sum Optimization and Sampling with Decreasing Stepsizes. In Advances in Neural Information Processing Systems, **NeurIPS 2020**.

AWARDS

Ontario Graduate Scholarship   2021-2022
Departmental Entrance Scholarship   2021
Science Undergraduate Research Award   2018

SERVICE

Reviewer for ICML 2021, NeurIPS 2021, AISTATS 2022, NeurIPS 2024.
Invited Talk at the McGill Artificial Intelligence Society, 2019.