Ethan "Ehsan" Lari

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Profile

- Research assistant specialized in statistical machine learning and signal processing at NTNU
- Over 5 years of research experience in the development of statistical machine learning algorithms
- Research experience in statistical machine learning and signal processing projects
- Several PhD project deliverables in high-quality venues including ICASSP and EUSIPCO
- O Strong academic background in mathematics, statistics, linear algebra, and optimization
- O Curious learner looking forward to making meaningful contributions in tackling fresh challenges

Professional Experience

Research and Teaching Assistant — Department of Electronic Systems Norwegian University of Science and Technology (NTNU)

Trondheim, Norway

Jan. 2020 -- Dec. 2024

- Conducted research on efficiency, privacy, and security of machine learning algorithms.
- Delivered teaching assistance in machine learning courses.

Assistant Professor — Department of Electronic Systems Norwegian University of Science and Technology (NTNU)

Trondheim, Norway Aug. 2022 - Dec. 2022

- Course lecturer for Design of Integrated Circuits (TFE4152).
- Guided graduate students to successfully complete their course projects.

Education

Doctor of Philosophy (PhD) — Signal Processing *Norwegian University of Science and Technology (NTNU)* Trondheim, Norway

Jan. 2020 -- Mar. 2024

Department of Electronic Systems (IES)

Master of Science (MSc) — Electrical Engineering

Tehran, Iran

Amirkabir University of Technology (Tehran Polytechnic), GPA: 3.91/4

Sep. 2016 — Dec. 2018

PhD Project

Title: Distributed Learning with Enhanced Efficiency, Robustness and Privacy

Supervisors: Prof. Stefan Werner (NTNU, Norway), Dr. Reza Arablouei (CSIRO, Australia)

Skills

Programming Languages: Python [Scikit-Learn, PyTorch (beginner)], SQL (beginner), HTML

Engineering Softwares: MATLAB, Microsoft Office

Operating Systems: Windows, Linux

Soft Skills: Problem Solving, Critical Thinking, Communication, Teamwork, Adaptability, Time

Management, Leadership

PhD Project Deliverables (Publications)

Journals...

- o E. Lari, R. Arablouei, V. C. Gogineni, S. Werner, "Noise-Robust and Resource-Efficient ADMM-based Federated Learning", submitted to IEEE Open Journal of Signal Processing.
- o E. Lari, R. Arablouei, V. C. Gogineni, S. Werner, "Resilience in Online Federated Learning: Mitigating Model-Poisoning Attacks via Partial Sharing", submitted to IEEE Transactions on Signal and Information Processing over Networks.

Conferences.....

- o E. Lari, R. Arablouei, and S. Werner, "Privacy-Preserving Distributed Nonnegative Matrix Factorization," in Proc. IEEE EUSIPCO 2024, Lyon, France, Aug. 2024.
- o E. Lari, R. Arablouei, N. K. D. Venkategowda, and S. Werner, "Distributed Maximum Consensus over Noisy Links," in Proc. IEEE EUSIPCO 2024, Lyon, France, Aug. 2024.
- E. Lari, V. C. Gogineni, R. Arablouei, and S. Werner, "On the Resilience of Online Federated Learning to Model Poisoning Attacks through Partial Sharing," in Proc. IEEE ICASSP, Seoul, South Korea, Apr. 2024.
- E. Lari, V. C. Gogineni, R. Arablouei, and S. Werner, "Continual Local Updates for Federated Learning with Enhanced Robustness to Link Noise," in Proc. IEEE APSIPA, Taipei, Taiwan, Nov. 2023.
- o E. Lari, V. C. Gogineni, R. Arablouei, and S. Werner, "Resource-Efficient Federated Learning Robust to Communication Errors," in Proc. IEEE SSP Workshop, Hanoi, Vietnam, July 2023.

Languages

Persian: Native proficiency

English: Full professional proficiency

Norwegian, Bokmål: Limited working proficiency

Honors and awards

Offer for Assistant Professor Position Department of Electronic Systems (IES)

NTNU Fall 2022

Accepted for PhD Program Department of Electronic Systems (IES)

NTNU Fall 2019

McGill university Fall 2019

Accepted for PhD Program ECE Department

McGill university Fall 2019

Interests and Hobbies

- Hiking and Camping
- Planning Events

References

Can be provided upon request