Armin Moharrer

moharrer.a@northeastern.edu

EDUCATION

Northeastern University, Boston, MA

Doctor of Philosophy in Electrical & Computer Engineering

Jan 2016 – May 2021

GPA: 4.0/4.0

Courses: Deep Learning, Information Theory, Big Data & Sparsity, Advanced Machine Learning **Research:** Leveraging Sparsity for the Design of Massively Distributed Optimization Algorithms **Supervisor**: Prof. Stratis Ioannidis

Northeastern University, Boston, MA

Master of Science in Electrical & Computer Engineering

Jan 2016 – May 2018

GPA: 4.0/4.0

Courses: HPC, Numerical Optimization, Machine Learning, Applied Prob. & Stochastic Process. **Thesis Title**: Distributing Frank-Wolfe via map-reduce

• Amirkabir University of Technology, Tehran, Iran

Bachelor of Science in Electrical Engineering

Sep 2011 – Sep 2015

GPA: 18.12/20.00

Ranked 15-th among 120 students of 2015 class.

EXPERIENCE

Liminal Sciences, Palo Alto, CA

May 2021-Present

Machine Learning and Signal Processing Scientist (Full Time)

Work on a variety of machine learning models for analyzing medical images.

Northeastern University, Boston, MA

Jan 2016-May 2021

Research Assistant (Ph.D. student)

Work on a variety of optimization algorithms, applications ranging from experimental design, graph mining tasks, influence maximization, caching in networks, regression.

Liminal Sciences, Palo Alto, CA

May 2020-Nov 2020

Machine Learning Engineer (Internship)

Work on a variety of deep neural networks and machine learning models for analyzing timeseries data, e.g., EEG data, via Tensor-Flow.

COMPUTER SKILLS

Languages: Python, C/C++

- Parallel Computing: Apache Spark, OpenMP, MPI
- Other: Keras, PyTorch, TensorFlow, TensorFlow-Probability, MATLAB, Latex, Linux, Tmux, Microsoft Office, Microsoft PowerPoint

PUBLICATIONS

Conference

• Armin Moharrer, Khashayar Kamran, Edmund Yeh, Stratis Ioannidis, "Robust Regression via Model Based Methods", (accepted for presentation) In European Conference on Machine

- Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD), Basque Country, Spain, 2021. (AR: 21%)
- Khashayar Kamran, Armin Moharrer, Stratis Ioannidis, Edmund Yeh, "Rate Allocation and Content Placement in Cache Networks", In *International Conference on Computer* Communication (INFOCOM), Vancouver, BC, Canada, 2021. (AR: 19.9%)
- Gözde Özcan, Armin Moharrer, Stratis Ioannidis, "Submodular Maximization via Taylor Series Approximation", In SIAM International Conference on Data Mining (SDM), Alexandria, VA, 2021. (AR: 21.3%)
- Milad Mahdian, Armin Moharrer, Stratis Ioannidis, Edmund Yeh. "Kelly Cache Networks." In International Conference on Computer Communication (INFOCOM), Paris, France, 2019. (AR: 19.7%)
- Armin Moharrer and Stratis Ioannidis. "Distributing Frank-Wolfe via Map-Reduce." In International Conference on Data Mining (ICDM), New Orleans, LA, 2017. (Selected among the "Best Papers of ICDM 2017", AR: 9.25%)

Journal

- Armin Moharrer, Jasmin Gao, Shikun Wang, José Bento, Stratis Ioannidis. "Massively Distributed Graph Distances.", IEEE Transactions on Signal and Information Processing over Networks, 2020.
- Milad Mahdian, **Armin Moharrer**, Stratis Ioannidis, Edmund Yeh. "Kelly Cache Networks.", IEEE/ACM Transactions on Networking, 2020.
- **Armin Moharrer** and Stratis Ioannidis. "Distributing Frank-Wolfe via Map-Reduce." In *Knowledge and Information Systems (KAIS), 2019.*

PRESENTATIONS

- Technical Presentation, Faculty and Grad Students at Boston College, Chestnut Hill, MA (virtual), March 2021.
 - Massively Distributed Graph Distances
- Poster Session, New England Machine Learning Day, Microsoft, Cambridge, MA, May 2018.
 - Distributing Frank-Wolfe via Map-Reduce
- Paper Presentation, ICDM 2017, New Orleans, LA, Nov 2017
 - Distributing Frank-Wolfe via Map-Reduce

TEACHING

Teaching Assistant, Northeastern University, Boston, MA

Spring 2017

Parallel Processing for Data Analytics

Mentor, Northeastern University, Boston, MA

Summer 2017 and Summer 2018

• Research Experience for Undergraduates (REU) Program

REVIEWING TASKS

- Reviewer for International Conference on Machine Learning (ICML) 2021, (4 papers)
- Reviewer for SIAM International Conference on Data Mining (SDM) 2021, (6 papers)
- Reviewer for IEEE Transactions on Signal and Information Processing over Networks 2020, (1 paper)