#### **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

**Dissertation:** Leveraging Structural Properties for Large-Scale Optimization

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: Distributing Frank-Wolfe via map-reduce

Supervisor: Prof. Stratis Ioannidis

Amirkabir University of Technology, Tehran, Iran

Bachelor of Science in Electrical Engineering

Sep 2011 - Sep 2015

GPA: 18.12/20.00

### **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 and Teaching Assistant (Ph.D. student)

Work on a variety of optimization algorithms with 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, Seminar 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
  - o 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 on Signal and Information Processing over Networks 2020, (1 paper)