Armin Moharrer

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EDUCATION

- **Northeastern University**, Boston, MA
  Doctor of Philosophy in Electrical 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 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 including experimental

  design, graph mining tasks, influence maximization, caching in networks, and 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 time-series 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

- Andrey Gritsenko, Yuan Guo, Kimia Shayestehfard, **Armin Moharrer**, Jennifer Dy, and Stratis Ioannidis, "Graph Transfer Learning", (Accepted for presentation) In *International Conference on Data Mining (ICDM),* Auckland, New Zealand, 2021. (AR: 9.9%)
- **Armin Moharrer**, Khashayar Kamran, Edmund Yeh , Stratis Ioannidis, "Robust Regression via Model Based Methods", 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

- Paper and Poster Presentation, ECML-PKDD 2021, Basque County, Spain (Virtual), September 2021
    - o Robust Regression via Model Based Methods
- Technical Presentation, Seminar at Fidelity Investments, Boston, MA (Virtual), March 2021.
    - o Robust Regression via Model Based Methods
- Technical Presentation, Seminar at Boston College, Chestnut Hill, MA (Virtual), March 2021.
    - o Massively Distributed Graph Distances
- Poster Session, New England Machine Learning Day, Microsoft, Cambridge, MA, May 2018.
    - o 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 Conference on Neural Information Processing Systems (NeurIPS) 2021, (5 papers)*
- *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)