Alireza Fallah

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Education

Massachusetts Institute of Technology, Cambridge, MA — 2017-Present
Ph.D. Student — GPA: 5.00/5.00
Department of Electrical Engineering and Computer Science
Advisor: Professor Asuman Ozdaglar

Sharif University of Technology, Tehran, Iran — 2012-2017
B.Sc. in Electrical Engineering (Communications) — Cumulative GPA: 19.63/20
B.Sc. in Pure Mathematics
B.Sc. Thesis Advisor: Professor Golestani

Research Interests

- Optimization
- Theory of Machine Learning
- Statistical inference

Honors and Awards

- **Siebel Scholar**, Class of 2019. Awarded annually for academic excellence and demonstrated leadership to over 90 top students from the world's leading graduate schools.
- **Ranked 1st in Cumulative GPA** among all entrants of 2012 (nearly 220 students), Electrical Engineering Department, Sharif University of Technology.
- **First prize**, 23rd International Mathematics Competition (**IMC**), Bulgaria, 2016.
- **Silver Medal**, 53rd International Mathematical Olympiad (**IMO**), Argentina, 2012.
- **Silver Medal**, 52nd International Mathematical Olympiad (**IMO**), Netherlands, 2011.
- **Gold Medal**, 29th Iranian National Mathematical Olympiad, Iran, 2011.
- **Gold Medal**, 28th Iranian National Mathematical Olympiad, Iran, 2010.

Publications

- N.S. Aybat, A. Fallah, M. Gürbüzbalaban, A. Ozdaglar, *"Robust Accelerated Gradient Method"*, arXiv:1805.10579, 2018.
- E. Mohammadi, A. Fallah, F. Marvasti, *"Sampling and Distortion Tradeoffs for Indirect Source Retrieval"*, IEEE Transactions on Information Theory, vol. 63, no. 11, pp. 6833-6848, 2017.
- J. Fageot, A. Fallah, M. Unser, *"Multidimensional Lévy White Noise in Weighted Besov Spaces"*, Stochastic Processes and their Applications, Volume 127, Issue 5, 2017.
- E. Mohammadi, A. Fallah, F. Marvasti, *"Sampling and Distortion Tradeoffs for Indirect Source Retrieval"*, 2016 IEEE Global Conference on Signal and Information Processing (GlobalSIP), Washington, DC, 2016.

Research and Work Experiences

- Summer internship at École Polytechnique Fédérale de Lausanne, Lausanne (**EPFL**), Switzerland, Summer 2015.
  Supervisor: Professor Unser
- Member of **Advanced Communications Research Institute**, 2014-2016.
  Worked on signal processing problems under the supervision of Professor Marvasti.
- Executive staff of 1st **Iranian Geometry Olympiad**, Isfahan, Iran, 2014.

Teaching Experiences

- Sharif University of Technology
  - Teaching Assistant for *Principles for Electrical Engineering and Lab*, Fall 2016.
  - Teaching Assistant for *Digital Signal Processing*, Spring 2016.
  - Teaching Assistant for *Introduction to Wireless Communications*, Spring 2016.
  - Teaching Assistant for *Engineering Mathematics*, Fall 2015.
  - Teaching Assistant for *Principles for Electrical Engineering and Lab*, Fall 2015.
  - Teaching Assistant for *Signals and Systems*, Fall 2015.
  - Teaching Assistant for *Principles of Economics*, Spring 2015.
  - Teaching Assistant for *Probability and Statistics*, Spring 2015.
- Young Scholars Club
  - Teaching *Algebra* at Young Scholars Club (**YSC**), Preparing students for International Mathematical Olympiad (IMO), 2012- 2013.

Leadership Roles and Activities

- Member of **LIDS Student Conference** Committee, 2018-2019.
- **Officer in Sidney-Pacific Graduate Community**, 2018-2019.
- **Big Event chair** of Persian Students Association (**PSA**), 2017-2018.

Skills

- Programming Languages: C++, Pascal, Assembly, Verilog (VHDL).
- Analysis Tools: MATLAB, Mathematica.
- Typesetting: LaTeX, Pages, Microsoft Word.