

Alireza Rezaei

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Last Update: Oct. 18, 2016

RESEARCH INTERESTS ◇ Spectral Graph Theory
 ◇ Design and Analysis of Approximation Algorithms
 ◇ Theoretical Machine Learning

EDUCATION ◇ **Ph.D. Student in Computer Science** Aug. 2014 – May 2019 (expected)
 Department of Computer Science & Engineering
 University of Washington

ADVISOR: Shayan Oveis Gharan

RELEVANT COURSEWORK: Recent Developments in Approximation Algorithms,
Entropy Optimality, Linear and Semi-Definite Programming in Approximation Algorithms, Randomized Algorithms, Polynomial Optimization

◇ **B.Sc. Degrees in Computer Engineering & Mathematics** Sept. 2009 – June 2014
Department of Computer Engineering, Department of Mathematical Sciences
Sharif University of Technology, Tehran, Iran

GPA: **18.76/20**

RELEVANT COURSEWORK: Spectral Graph Theory, Randomized Algorithms and Probabilistic Methods, Graph theory and its Applications

PUBLICATIONS ◇ *Approximation Algorithms for Finding Maximum Induced Expanders*
Shayan Oveis Gharan, Alireza Rezaei
To be appear in 28th ACM-SIAM Symposium on Discrete Algorithms (**SODA'17**)

◇ *Monte Carlo Markov Chain Algorithms for Sampling Strongly Rayleigh Distributions and Determinantal Point Processes*
Nima Anari, Shayan Oveis Gharan, Alireza Rezaei
appeared in the 2016 edition of the Conference on Learning Theory (**COLT'16**)

◇ *$\{0, 2\}$ -Degree free spanning forests in graphs*
Saieed Akbari, Kenta Ozeki, Alireza Rezaei, Rahmtin Rotabi, Sara Sabour
Appeared in the Journal of Discrete Mathematics, Volume 338, Issue 7, July 2015

HONORS AND AWARDS ◇ **Faithful Steward Endowed Fellowship** , Sept. 2014 – June 2015
 ◇ **Silver Medal** in the Iranian National Olympiad in Informatics (INOI), 2008
 ◇ **Ranked 3rd** in Computer Engineering class of 2014, Sharif University, Sept. 2013

- ◇ **Ranked 4th** in National Entrance Exam for Master of Science in Iran, 2012

TEACHING
EXPERIENCE

- ◇ **Teaching Assistant, University of Washington**
 - Design and Analysis of Algorithms (CSE 521), Prof. Shayan Oveis Gharan Spring 2016
 - Randomized Algorithms (CSE 525), Prof. James. R. Lee Fall 2016
- ◇ **Lecturer at YSC** ¹ June 2011 – June 2014
 - Teaching Graph Theory and Special Topics such as Linear Algebra in training campus of Iranian National Olympiad in Informatics (INOI), YSC
 - Problem Designer of the Iranian National Olympiad in Informatics (INOI) finals, Sept. 2013
- ◇ **Teaching Assistant, Sharif University of Technology**
 - Design and Analysis of Algorithms Fall 2012, Spring 2013
 - Data Structures and Algorithms Fall 2012, Fall 2011
 - Theory of Languages and Automata Spring 2012
 - Statistical Pattern Recognition Spring 2013
 - Modern Information Retrieval Fall 2013

PRESENTATIONS

- ◇ **Monte Carlo Markov Chain Algorithms for Sampling Strongly Rayleigh Distributions and Determinantal Point Processes**
COLT 2016 June 2016
- ◇ **Monte Carlo Markov Chain Algorithms for Sampling Strongly Rayleigh Distributions and Determinantal Point Processes**
Qualifying Exam, University of Washington May 2016
- ◇ **Approximation Algorithms for Finding Maximum Induced Expanders**
Microsoft Research Lab, Redmond February 2016
- ◇ **Approximation Algorithms for Finding Maximum Induced Expanders**
Theory Seminar, University of Washington February 2016

SKILLS

- ◇ PROGRAMMING LANGUAGES: C/C++, Python, Racket (LISP/Scheme)
- ◇ WEB/DB TECHNOLOGIES: HTML, CSS, Javascript, MySQL.
- ◇ TYPESETTING: \TeX , \LaTeX , Microsoft Word

REFERENCES

- ◇ Prof. Shayan Oveis Gharan (shayan@cs.washington.edu)
- ◇ Prof. James. R. Lee (jrl@cs.washington.edu)
- ◇ Prof. Saieed Akbari (s_akbari@sharif.edu)

¹Young Scholars Club acts as the sole authority and regulating body for scientific Olympiads in Iran.