

Farzam Ebrahimnejad

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- RESEARCH INTERESTS
- ◇ Approximation Algorithms
 - ◇ Spectral Graph Theory
 - ◇ Probability Theory
 - ◇ Online Algorithms
 - ◇ Counting and Sampling
- EDUCATION
- ◇ **Ph.D. Student in Computer Science and Engineering** Sept. 2017 – present
Paul G. Allen School of Computer Science & Engineering
University of Washington
Advisors: Shayan Oveis Gharan and James R. Lee
 - ◇ **B.Sc. Degree in Computer Engineering** Sept. 2013 – July 2017
Department of Computer Engineering
Sharif University of Technology
- PUBLICATIONS
- ◇ **Non-existence of annular separators in geometric graphs**
Farzam Ebrahimnejad, James R. Lee
Submitted, 2021
Manuscript available at *arXiv:2107.09790 [math.CO]*
 - ◇ **Multiscale entropic regularization for MTS on general metric spaces**
Farzam Ebrahimnejad, James R. Lee
ITCS 2022
 - ◇ **Counting and sampling perfect matchings in regular expanding non-bipartite graphs**
Farzam Ebrahimnejad, Ansh Nagda, Shayan Oveis Gharan
ITCS 2022
 - ◇ **On planar graphs of uniform polynomial growth**
Farzam Ebrahimnejad, James R. Lee
Probability Theory and Related Fields, 2021
 - ◇ **On the gap between separating words and separating their reversals**
Farzam Ebrahimnejad
Theoretical Computer Science, 2018
- PRESENTATIONS
- ◇ **On planar graphs of uniform polynomial growth** May 2021
Random Geometry and Statistical Physics Online Seminar
 - ◇ **On planar graphs of uniform polynomial growth** June 2019
UW Theory Seminar, Seattle, WA
 - ◇ **On the gap between separating words and separating their reversals** Dec. 2016
Combinatorics, Automata and Number Theory School, Marseille, France
- HONORS AND AWARDS
- ◇ **2nd place** in the *17th* Asia Regional ACM-ICPC, Tehran, Iran 2015
 - ◇ **2nd place** in the *16th* Asia Regional ACM-ICPC, Tehran, Iran 2014

- LONG-TERM VISITS
- ◇ Geometry of Polynomials Program Jan.-Feb. 2019
Simons Institute for the Theory of Computing, Berkeley, CA
- TEACHING AND WORKING EXPERIENCE
- ◇ **Teaching Assistant**
 - ◇ **University of Washington**
 - Design and Analysis of Algorithms (CSE 521) Fall 2021
 - Design and Analysis of Algorithms (CSE 521) Fall 2020
 - Randomized Algorithms and Probabilistic Analysis (CSE 525) Spring 2019
 - Design and Analysis of Algorithms (CSE 521) Fall 2018
 - Introduction to Algorithms (CSE 421) Fall 2017
 - ◇ **Sharif University of Technology**
 - Design of Algorithms Fall 2016
 - Theory of Languages and Automata Fall 2015
 - Data Structures and Algorithms Spring 2015
 - ◇ **Teaching Special Topics in Mathematics and Computer Science** 2013 – 2014
Teaching topics such as combinatorics, graph theory, and algorithms to high school students preparing for the Olympiad in Informatics.
 - ◇ **Software Developer at Torob** 2014 – 2017
Torob is an Iranian price comparison and shopping search engine. I worked on Torob’s query analyzer and suggestion service.
- SERVICE
- ◇ Reviewer: FOCS, SODA, SIAM Journal on Computing (SICOMP).
- SKILLS
- ◇ Programming Languages: Julia, Python, C/C++, Matlab.