

Mahsa Derakhshan

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- RESEARCH ◇ Algorithmic game theory
- INTERESTS ◇ Algorithms for massive datasets.
- EDUCATION ◇ **PhD in Computer Science**, Jan 2016 to Present
Computer Science Department, University of Maryland.
· *Advisor*: Prof. MohammadTaghi Hajiaghayi
- ◇ **B.Sc. in Computer Software Engineering**, Sep 2011 to Dec 2015
Computer Engineering Department, Sharif University of Technology
· *Thesis*: Graphical Colonel Blotto
· *Thesis supervisor*: Prof. Mohammad Ghodsi
- HONORS AND ◇ **3rd place** in the Mid-Atlantic USA Regional ACM-ICPC Contest and advanced to ACM-ICPC World Finals 2017 2016
AWARDS
- ◇ Awarded as **Outstanding Student** by the university president 2011
- ◇ Recipient of the grant for undergraduate studies from the Iranian National Elites Foundation, for outstanding academic success. 2011 - 2015
- ◇ **Gold Medal** in the 19th Iraninan National Olympiad in Informatics. Young Scholars Club, Tehran, Iran. 2010
- INTERNSHIPS ◇ Software engineering internship at **Google** summer 2017
- RESEARCH ◇ *Spatio-Temporal Security Games Beyond One Dimension*
EXPERIENCE S. Behnezhad, M. Derakhshan, M.T. Hajiaghayi, S. Seddighin
EC'18
- ◇ *Brief Announcement: MapReduce Algorithms on Massive Trees*
M.H. Bateni, S. Behnezhad, M. Derakhshan, M.T. Hajiaghayi, V. Mirrokni
ICALP'18
- ◇ *From Battlefields to Presidential Elections: Winning Strategies of Blotto and Auditing Games*
S. Behnezhad, A. Blum, M. Derakhshan, M.T. Hajiaghayi, M. Mahdian, C. Papadimitriou, R. Rivest, S. Seddighin, P. Stark
SODA'18
- ◇ *On Distributed Hierarchical Clustering*
M.H. Bateni, S. Behnezhad, M. Derakhshan, M.T. Hajiaghayi, R. Kiveris, S. Lattanzi, V. Mirrokni
NIPS'17
- ◇ *A Polynomial Time Algorithm For Spatio-Temporal Security Games*
S. Behnezhad, M. Derakhshan, M.T. Hajiaghayi, A. Slivkins.
EC'17
- ◇ *Graph Matching in Massive Datasets*
S. Behnezhad, M. Derakhshan, H. Esfandiari, M.T. Hajiaghayi, E. Tan, H. Yammi.
SPAA'17

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- ◇ *Faster and Simpler Algorithm for Optimal Strategies of Blotto Game*
S. Behnezhad, S. Dehghani, M. Derakhshan, S. Seddighin, M.T. Hajiaghayi.
31st AAAI Conference on Artificial Intelligence, **AAAI'17**

WORKING PAPERS ◇ *Efficient Parallel Methods for Dynamic Programming on Massive Graphs*
M. Bateni, S. Behnezhad, M. Derakhshan, M.T. Hajiaghayi, S. Lattanzi, V. Mirrokni

TEACHING EXPERIENCE ◇ **Teaching Assistant**, University of Maryland
· Introduction to Algorithms (spring 2016)
◇ **Teaching Assistant**, Sharif University of Technology
· Data Structures and Fundamentals of Algorithms (Fall 2013, Fall 2014)
· Design of Algorithms (Fall 2013, Spring 2014, Fall 2014)
· Theory of Computation and Complexity (Spring 2014)
· Discrete Structures (Spring 2015)
◇ **Teaching in High Schools**
Preparing students for Olympiad in Informatics. Topics included Algorithms, Graph Theory, Problem Solving Strategies, and Programming in c++.

COURSEWORK ◇ **University of Maryland:**
· Applied Mechanism Design for Social Good
· Advanced Topics in Theory of Computing: Bandits, Experts, and Games
· Information Centric Design of Systems
· Randomized Algorithms
◇ **Sharif University Of Technology:**
· Advanced Topics in Theory of Computability, Complexity and Logic
· Advanced Computational Geometry
· Web programming

SKILLS ◇ **Programming/Scripting Languages:** C++, Java and Python.
◇ **Hadoop Eco-systems:** Spark, Google Flume
◇ **Web/DB Technologies:** HTML5, CSS3, Javascript and SQL
◇ **Theory Topics:** Skilled in Algorithms and Graph Theory
◇ **Operating Systems:** Mac, Windows, Linux
◇ **Typesetting:** L^AT_EX, T_EX, Vim,

LANGUAGE ◇ Persian (native), English (fluent).

REFERENCES ◇ Available upon request.