Mohammad Reza Khani

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EDUCATION

University of Maryland, College Park, MD Doctor of Philosophy, Computer Science (Algorithms & Theory), Sep 2011-Present GPA: 3.9/4

University of Alberta, Edmonton, AB Master of Science, Computing Science (Theory of Computation), Sep 2009- Sep 2011 GPA: 3.9/4

Amirkabir University of Technology (Tehran Poly-technique), Tehran, Iran Bachelor of Engineering, Computer Engineering (Software Engineering), Sep 2005, Sep 2009 GPA: 18.65/20

RESEARCH INTEREST

Algorithmic Game Theory Network Design Social Networks Approximation Algorithms Randomized Algorithms Online Algorithms

PUBLICATION

- Yoram Bachrach, Sofia Ceppi, Ian A. Kash, Peter Key, and Mohammad Reza Khani. Mechanism Design for Mixed Participants, to be submitted.
- Gagan Goel, Mohammad Reza Khani, and Renato Paes Leme. Core-competitive Auctions, Economics and Computation (EC) 2015.
- Gagan Goel, Mohammad T. Hajiaghayi, and Mohammad Reza Khani. Randomized Revenue Monotone Mechanisms for Online Advertising, Conference on Web and Internet Economics (WINE) 2014.
- Mohammad T. Hajiaghayi, Theodore Johnson, Mohammad Reza Khani, and Barna Saha. Hierarchical Graph Partitioning, Symposium on Parallelism in Algorithms and Architectures (SPAA) 2014.
- Hossein Esfandiari, Mohammad T. Hajiaghayi, Mohammad Reza Khani, Vahid Liaghat, Hamid Mahini, and Harald Racke. Stochastic Online Buffer Scheduling, International Colloquium on Automata, Languages, and Programming (ICALP) 2014.
- Gagan Goel and Mohammad Reza Khani. Revenue Monotone Mechanisms for Online Advertising, World Wide Web Conference (WWW) 2014.
- Mohammad T. Hajiaghayi, Rohit Khandekar, Mohammad Reza Khani, and Guy Kortsarz. Approximation Algorithms for Movement Repairmen, Approx 2013.
- Mohammad Reza Khani and Mohammad R. Salavatipour. Approximation algorithms for min-max tree cover and bounded tree cover problems. Approx 2011.
- Mohammad Reza Khani and Mohammad R. Salavatipour. Improved approximations for buy-atbulk and shallow-light k-steiner trees and (k, 2)-subgraph, International Symposium on Algorithms and Computation (ISAAC) 2011.

HONORS AND ACHIEVEMENTS

Future Faculty Program Fellowship, University of Maryland, 2015.

Dean's Fellowship, University of Maryland, 2011-2013.

34th Place, ACM International Collegiate Programming Contest (ICPC) World Finals KTH - The Royal Institute of Technology, April 18-22 2009, Stockholm, Sweden.

2nd Place, Iranian National Collegiate Computer Olympiad August 2008, among the best computer engineering and computer science students of Iran.

Honorable Mention (top 2%), ACM/ICPC World Finals University of Alberta, April 6-10 2008, Fairmont Banff Springs, Banff, Canada. (Not participated in the final event)

26th Place, ACM/ICPC World Finals

ACM Japan Chapter and IBM Tokyo Research Lab, March 15, 2007, 88 teams competed from 6,099 teams selected from 1,756 universities in 82 countries competing at 205 sites and hundreds more had competed at preliminary contests worldwide, sponsored by IBM.

Silver Medal, Iranian National Olympiad in Informatics (INOI) September 2004, This Olympiad is held each year in order to select national team members for competing in International Olympiad in Informatics (IOI).

PROFESSIONAL EXPERIENCE

Research Internship Fall 2014, Microsoft Research, Cambridge, UK. Worked on designing and implementing transition mechanisms (from GSP to truthful mechanisms) for ad auctions.

Research & Software Engineering Internship Summer 2014, Google, New York City, New York, USA. Worked on designing and implementing core-competitve truthful mechanisms for a few auctions happening in Google.

Research & Software Engineering Internship Summer 2013, Google, New York City, New York, USA. Worked on designing and implementing revenue-monotone truthful mechanisms for a few auctions happening in Google.

Software Engineering Internship Summer 2012, Google, Mountain View, California, USA. Implemented health status variables for a high throughput, multi-home, real-time, scalable, and disaster safe data base.

Scientific Committee in Alberta Collegiate Programming Contest Problem setter & Judge, October 2010, Alberta Collegiate Programming Contest (ACPC), University of Alberta, Sponsored by Alberta Innovates Technology Futures.

Scientific Committee for Amirkabir Annual Programming Contest Problems setter & Judge, November 2006, Amirkabir Annual Programming Contest (AAPC) final round, Amirkabir University of Technology, Sponsored by LG

REFEREE

ACM Symposium on the Theory of Computing (STOC), European Symposium on Algorithms (ESA), Conference on Economics and Computation (EC), and World Wide Web (WWW).

TALKS

"Revenue Monotone Mechanisms for Online Advertising" at University of Maryland, Google Research New York, and New York Computer Science and Economics Day.

"Approximation Algorithms for Movement Repairmen" at University of Maryland and Google Research New York.

"Approximation algorithms for min-max tree cover and bounded tree cover problems" at University of Maryland and University of Alberta.

REFERENCES

MohammadTaghi Hajiaghayi, University of Maryland, hajiagha@cs.umd.edu Gagan Goel, Google Inc., gagangoel@google.com Ian Kash, Microsoft Research Ltd., iankash@microsoft.com