

## Curriculum Vitae

Dept. of Mathematical Sciences  
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# Ramin Javadi Jourtani

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## Education

Sharif University of Technology **Ph.D.** in Mathematics Sep. 2007 – Sep. 2011

- Title of Thesis: Isoperimetric problems on graphs.  
Under Supervision of Prof. Amir Daneshgar

Isfahan University of Technology **M.Sc.** in Mathematics Sep. 2005- July 2007

- Title of Thesis: Chip-firing game and  $b$ -coloring of graphs.  
Under Supervision of Prof. Behnaz Omoomi

Isfahan University of Technology **B.Sc.** in Mathematics Sep. 2002- July 2005

## Research interests

Graph Theory, Combinatorics, Geometric Analysis of Graphs, Computational Complexity, Algorithms

## Honors and awards

**Graduated with 1<sup>st</sup> rank** among the mathematics Ph.D. students in Sharif university of technology. (Spring 2011)

**Graduated with 1<sup>st</sup> rank** among the mathematics graduate students in Isfahan university of technology. (Spring 2007)

**Distinguished graduate thesis**, Isfahan University of Technology among all theses completed from 2004 until 2007. (Spring 2007)

**Graduated with 1<sup>st</sup> rank** among the pure mathematics undergraduate students (Summer 2005)

**Awarded third prize** in the 12<sup>th</sup> international mathematics competition, Blagovgrad, Bulgaria. (Summer 2005)

**Awarded second prize** in the 29<sup>th</sup> mathematics competition held by Iranian Mathematical Society. (Spring 2005)

**Awarded second prize** in the essay-writing competition held by Iranian Mathematical Society. (April 2003)

## Appointments

Since Aug. 2011 Isfahan University of Technology, Assistant Professor in Mathematics

#### Papers in Refereed Journals

- [1] R. Javadi, Z. Maleki, B. Omoomi, *on the local clique covering of graphs*, Submitted.
- [2] A. Daneshgar, R. Javadi, B. Shariat Razavi, *Clustering using isoperimetric number of trees*, Submitted.
- [3] A. Daneshgar and R. Javadi, *On the complexity of isoperimetric problems on trees*, Discrete Appl. Math. **160** (2012) 116-131.
- [4] A. Daneshgar, R. Javadi and L. Miclo, *On nodal domains and higher-order Cheeger inequalities of finite reversible Markov processes*, Stochastic Processes and their Applications **122** (2012) 1748–1776.
- [5] A. Daneshgar, H. Hajiabolhassan and R. Javadi, *On the isoperimetric spectrum of graphs*, J. Com. Theory B. **100** (2010) 390–412.
- [6] R. Javadi and B. Omoomi, *On the  $b$ -coloring of Kneser graphs*, Discrete Math. **309** (2009) 4399-4408.
- [7] R. Javadi and B. Omoomi,  *$b$ -coloring of Cartesian product of graphs*, to appear in Ars combinatoria.
- [8] R. Javadi and B. Omoomi, *Strategy of conflicts in game theory*, Farhang va Andishe Riyazi **40** (2008) 47-62. (in Farsi)

#### Papers in Conferences

- [1] A. Daneshgar and R. Javadi. *Isoperimetry problems on trees*. International Workshop of Graph Coloring and its Application, Tiruchirappalli, India, 7-9 Aug. 2010. (Invited Speaker)
- [2] B. Omoomi and R. Javadi.  *$b$ -Coloring of Kneser graphs*. 39th Annual Iranian Mathematical Conference, Shahid Bahonar University of Kerman, 24-27 Aug. 2008.
- [3] R. Javadi and B. Omoomi. *On the dominating coloring of graphs*. 38th Annual Iranian Mathematical Conference, University of Zanjan, 3-6 Sep. 2007.
- [4] B. Omoomi and R. Javadi. *On the  $b$ -coloring of some special graphs*, 21st British Combinatorial Conference. University of Reading, 8-13 July 2007.

#### Books

- [1] B. Omoomi and R. Javadi, Combinatorial games, *Jahad Daneshgahi*, 2010 (in Farsi).
- [2] R. Javadi, TeX Tutorial, *Amoozeshhaye Bonyadi*, 2012 (in Farsi).

#### Conferences and workshops participated

- International Conference on Recent Trends in Graph Theory and Combinatorics, Cochin, India, 12-15 Aug. 2010.
- 38<sup>th</sup> Annual Iranian Mathematical Conference, University of Zanjan, 3-6 Sep. 2007.

Workshop of “Algebraic graph theory”, IPM, Tehran, May 2007.

36<sup>th</sup> Annual Iranian Mathematical Conference, University of Yazd, Iran, Sep. 2005.

35<sup>th</sup> Annual Iranian Mathematical Conference, Shahid Chamran University, Ahvaz, Iran, Jan. 2005.

**Courses Taught**

Graph Theory

Combinatorics

Advanced Graph Theory

Calculus

Discrete Mathematics

Mathematical Engineering