

## Mehvish Irfan Poshni

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### EDUCATION

Ph.D. in Computer Science, 2012  
Columbia University, New York, NY, USA.

M.S. in Computer Science, 2007  
Columbia University, New York, NY, USA.

B.S. in Computer Science, 2001  
National University of Computer and Emerging Sciences, Lahore, Pakistan

### JOURNAL PUBLICATIONS

- J. L. Gross, I. F. Khan, and M. I. Poshni. Genus distributions for iterated claws. *Electronic Journal of Combinatorics*, **21(1)**:#P1.12, 2014.
- M. I. Poshni, I. F. Khan, and J. L. Gross. Genus distributions of iterated 3-wheels and 3-prisms. *Ars Mathematica Contemporanea*, **7(2)**:423-440, 2014.
- I. F. Khan, M. I. Poshni, and J. L. Gross. Genus distributions of  $P_3 \square P_n$ . *Discrete Mathematics*, **312(19)**:2863-2871, 2012.
- M. I. Poshni, I. F. Khan, and J. L. Gross. Genus distributions of graphs under self-edge-amalgamations. *Ars Mathematica Contemporanea*, **5**:127-148, 2012.
- M. I. Poshni, I. F. Khan, and J. L. Gross. Genus distributions of 4-regular outerplanar graphs. *Electronic Journal of Combinatorics*, **18**:#P212, 2011.
- I. F. Khan, M. I. Poshni, and J. L. Gross. Genus distributions of graph amalgamations: Pasting when one root has arbitrary degree. *Ars Mathematica Contemporanea*, **3**:121-138, 2010.
- M. I. Poshni, I. F. Khan, and J. L. Gross. Genus distributions of graphs under edge-amalgamations. *Ars Mathematica Contemporanea*, **3**:69-86, 2010.
- J. L. Gross, I. F. Khan, and M. I. Poshni. Genus distribution of graph amalgamations: Pasting at root-vertices. *Ars Combinatoria*, **94**:33-53, 2010.

### INVITED TALKS

- Conference Talk for the AMS Special Session *Topological Graph Theory: Structure and Symmetry*, 2012 Joint Mathematics Meetings, Boston. *Title: Genus Distributions of 4-regular outerplanar graphs*. January 04, 2012.
- Seminar Talk, Computer Science Department, Columbia University, New York. *Title: Genus Distributions of 4-regular outerplanar graphs*. December 09, 2011.
- PUCIT Research Series Seminar Talk, PUCIT, Allam Iqbal campus, Lahore. *Title: Introduction to topological graph theory with a special focus on genus distributions*. April 11, 2012.
- Conference Talk for 2012 International Conference on Open Source Systems and Technologies, UET, Lahore. *Title: An algorithm for computing genus distributions of 4-regular outerplanar graphs*. December 22, 2012.
- Research talk for CS Colloquium, *Information Technology University, Lahore*. *Title: Gracefulness of a certain class of lobsters*. April 2, 2019.

## WORK EXPERIENCE

- *Employer:* PUCIT, University of The Punjab.  
*Assistant Professor.* June 2012 to date.  
*Courses:* *Graph Theory, Discrete Mathematics, Theory of Computation, Advanced Analysis and Design of Algorithms, Analysis of Algorithms, Linear Algebra, Independent studies on topics in structural graph theory, approximation algorithms and quantum computing.*
- *Employer:* National University of Computer and Emerging Sciences, Lahore  
*Visiting Faculty Member for Spring 2012*  
*Course:* *Theory of Automata*
- *Employer:* Columbia University  
*Teaching Assistant for Courses:* *Graph Theory, Topics in Graph Theory, Combinatorial Theory, Discrete Mathematics.*
- *Employer:* Techlogix Pakistan (pvt) Ltd, Lahore, 2001 - 2004.  
*Senior Software Engineer*

## GRANTS

- *Funding Agency:* NRPU  
*Role:* co-PI  
*Amount:* Rs. 2.1 Million  
*Title:* *Longest Paths in Networks*

## OTHER SERVICE

- *Supervision:* 7 MPhil students.
- *External examiner:* Thesis committee of Saira Karim, *On Generation of Some Non-equivalent Combinatorial Objects*, National University of Computer and Emerging Sciences, December 2013.
- *Committee service at PUCIT:* PUCIT Disciplinary Committee (New campus), Unfair Means and Cheating Committee, PUCIT Admissions Committee for MS/Mphil and PhD Programs, PUCIT Graduate Financial Support Review Committee, PUCIT Research Advisory Committee, Committee for Preparation of SOPs regarding MPhil and PhD degree programs, PUCIT NCEAC Accrediation Committee, PhD Comprehensive Examination Committee, Day care Committee (New Campus), SoftExpo2013 Steering Committee, PUCIT New Campus Management Committee, Committee for Making Policy for PUCIT Best Teacher Award.
- *PUCIT Student Societies:* PUCIT Sports Society, Environment Society.

## HONORS

- Fulbright/HEC/USAID Scholarship 2007-2010 (For the Ph.D. program).
- Fulbright/USAID Scholarship 2005-2007 (For the M.S. program).
- Graduated Magna cum Laude from National University of Computer and Emerging Sciences.