

Mohammad Reza Hoseiny Farahabady

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 Department of Computer and IT E-mail: *m_hosseini@ce.sharif.edu*
 Engineering, Prof. Movaghar
 laboratory, Azadi Ave., Tehran, Iran.

Research Interests

Theoretical and practical Computer Science, mainly:

- Combinatory, Game and Graph Theory
- Parallel and Distributed Systems
- Performance Analyses of Computer Networks
- Wireless (sensor) network
- Advanced Data Structures and Algorithms

Education

Sharif University of Technology, Tehran, Iran, (2000-present)

PhD candidate, in Computer Engineering, Major: Software Engineering, Sept. 2007-present. Under Supervision: Prof. Ali Movaghar,

M.S Major : Computer Networks, IT Engineering, Department of Computer Engineering, Sharif University of Technology, Tehran, IRAN, August 2007. Final GPA: 16.54/20,

B.Sc. in Computer Engineering, Major: Software Engineering, September 2000 -June 2005, Final GPA: 16.24/20

M.S. project title: "On the topological properties and routing algorithm on the WK-Pyramid Networks", Supervisor: "*Hamid Sarbazi-azad*"

B.Sc. project title: "On the Pancyclicity and Hamiltonian on the Mesh Pyramid Networks", Supervisor: "*Hamid Sarbazi-azad*"

Diploma, Mathematics and Physics Discipline, 1996–2000. (GPA: **19.73/20**)

Relevant Course

Graduate courses passed:

- *Network Based Computing (17/20)*
- *Advanced Network (20/20)*
- *Game theory (17.2/20)*
- *Interconnection Networks (17/20)*
- *Advanced topic in Wireless and sensor networks (17/20)*

- *Graph Theory and their Application (15.5/20)*
- *Modeling and Analyzing of Computer Networks (16.1/ 20)*
- *Advanced Probability theory and Stochastic Process (18/20)*
- *Parallel Processing (16.5/20)*
- *Cryptography Theory (15.5/20)*
- *Performance Evaluation of Computer Systems (15/20)*
- *Verification of Reactive Systems(14.5/20)*
- *Data Compression (12.5/20)*
- *Advanced Computer Architecture (14.5/20)*
- *Advanced distributed operating systems (15/20)*
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**Educational &
Professional
experience**

- *Lecturer*, Glopaigan University of Technology, Fall 2009, Course: Excel and Access VBA programming, (info@gut.ac.ir)
- *Lecturer*, Glopaigan University of Technology, Spring 2009, Course: Programming languages (Pascal), (info@gut.ac.ir)
- *Lecturer*, Glopaigan University of Technology, Spring 2009, Course: computer lab, (info@gut.ac.ir)
- *Lecturer*, Sharif University of Technology, Fall 2007, Course: Programming languages (Pascal), (sani@sharif.edu)
- *Research Assistant* at Sharif University of Technology, Prof. Movaghar Laboratory, Tehran Iran. [June 2007- Present]
- *Research Assistant* at Institute for Studies in Theoretical Physics and Mathematics (**IPM**) Tehran, Iran. [October 2003 – May 2007]
- *Web Master*, Computer Society of Iran Computer Conference 2010 (CSICC'10). Septembe 2009- presentr (www.CSICC2010.com) (Program chair: Prof. Hassan Abolhassani; abolhassani@gmail.com)
- *Web Master*, Computer Society of Iran, Iran's First ICT Congress 2010, IICTC'10. Novemt 2009- presentr (<http://paper.iictc.ir/>) (Program chair: Prof. Jafra Habibi; jhabibi@Sharif.edu)
- *Web Master*, Computer Society of Iran Computer Conference 2006 (CSICC'06). Septembe 2005- January 2006 (www.CSICC2006.ipm.ir) (Program chair: Prof. Hamid Sarbazii Azaddd, azad@ipm.ir)
- *Teaching Assistant*, Sharif University of Technology, Spring 2009, Course: Modeling and Analysis of Computer Networks ([Movaghar@ipm.ir](mailto: Movaghar@ipm.ir))(<http://ce.sharif.edu/courses/87-88/2/ce657/>)
- *Teaching Assistant*, Sharif University of Technology, fall 2005, Course: Advanced Network (Ak@ipm.ir)
- *Teaching Assistant*, Sharif University of Technology, Fall 2003, Course: Programming

languages (Pascal)

Publications

Journal Papers:

- M.R. Hoseiny Farahabady, N. Imani, H. Sarbazi-Azad, "Some Topological and Combinatorial Properties of WK-Recursive Mesh and WK-Pyramid Interconnection Networks", Journal of Systems Architecture, Vol. 54 ,(10) , pp. 967-976, (Oct. 2008)
- Mohammad R. Hoseinyfarahabady, Hamid Sarbazi-Azad: On Pancyclicity Properties of OTIS Networks. Lecture Notes in Computer Science, Volume 4782/2007, pp. 545-553
- M. Hoseiny Farahabady, Farshad Safaei, Ahmad Khonsari, Mahmood Fathy: Characterization of spatial fault patterns in interconnection networks. Journal of Parallel Computing , Vol. 32, (11-12): pp. 886-901 (2006).
- M. Hoseiny Farahabady, Hamid Sarbazi-Azad: The Grid-Pyramid: A Generalized Pyramid Network. The Journal of Supercomputing, Vol. 37(1): pp. 23-45, (2006)

Conference Papers:

- Mostafa Rezazad, M. Hoseiny Farahabady, Hamid Sarbazi-Azad: A Deadlock Free Short Path Routing Algorithm for WK-Recursive Meshes. ICDCN 2008, India: pp. 280-285.
- Mohammad R. Hoseinyfarahabady, Hamid Sarbazi-Azad: On Pancyclicity Properties of OTIS Networks. HPC 2007, USA,: pp. 545-553.
- M. R. Hoseiny-Farahabady, F. Safaei, Ahamd Khonsari, M. Fathy: On the Fault Patterns Properties in the Torus Networks, AICCSA'2006, UAE, pp. 84-90, (2006).
- M. R. Hoseiny-Farahabady, H. Sarbazi-Azad, The WK-recursive pyramid: An Efficient Network Topology, 8th IEEE International Symposium on Parallel Architectures, Algorithms and Networks, IEEE-ISPAN 2005 , USA , pp. 312-317, (Dec. 2005).
- M.R. Hoseiny-Farahabady, H. Sarbazi-Azad, The RTCC-pyramid: A Versatile Pyramid network, 8th International Conference on High-Performance Computing in Asia-Pacific Region IEEE HPC-ASIA 2005, China, pp. 493-498, (Nov. 2005).
- M. Hoseiny Farahabady, H. Sarbazi-Azad: The recursive transpose-connected cycles (RT interconnection network for multiprocessors. SAC 2005: New Mexico, USA, 734-738
- M. R. Hoseiny-Farahabady, H. Sarbazi-Azad, On the Hamiltonian Connectedness of Pyramids, 4th IASTED International Conference on Communication Systems and Networks Thailand. April 2005.
- M. R. Hoseiny-Farahabady, H. Sarbazi-Azad, Algorithmic Construction of Hamiltonian Cycles in OTIS-Networks, 4th IASTED International Conference on Communication Systems and Networks, Thailand. April 2005.

For DBLP references please see: <http://sigmod.org/dblp/db/indices/a-tree/f/Farahabady:M=Hoseiny.html>

For Bibsonomy Bibliography references please see:

Technical Skills

- *Programming Languages*

Proficient in *VC++*, *C/C++*, *Java*, *Pascal*, *80x86 Assembly*.
Also familiar with *C#*, *VC. Net*, *VB*.

- *Web Development*

Proficient in *HTML*, *PHP*, *XML*, *ASP*.
familiar with *JSP*, *ASP.Net*.

- *Database Systems*

Proficient in design and implementation of databases using *MySQL*, *Microsoft Access*, and *Microsoft SQL Server 2000*.

Languages

Persian Fluent, native

English Fluent

TOEFL score: (Dec. 04) total : 213, Listening : 17, Structure/Writing : 24 , Reading : 23, Writing 3.5. (computer based Toefl)

GRE General test: (Oct. 04) Verbal: 300, Quantitative: 800, Writing: 3.0. (PB)

Honors

2000: The fourth rank in the general annual entrance exam for Iranian Universities. (Among more than 400000 applicants).

2005: The 10th rank in the annual M.S. entrance exam for Iranian Universities. (Among more than 2000 applicants).

2007: The first rank in the annual PhD. entrance exam for Sharif University. (Among about 90 applicants).

2005: Acquiring an admission along with \$22000 full assistantship from Southern Illinois University (USA visa was rejected)

2006: Acquiring an admission along with \$23000 full assistantship from Southern Illinois University (USA visa was rejected)

2007: Acquiring an admission along with \$23000 full assistantship from Southern Illinois University In PhD. degree.

Reference

- **Ali Movaghar Prof.**, Sharif University of Technology & IPM School of Computer Science Tehran, Iran, Email: movaghar@sharif.edu
- **Hamid Sarbazi-Azad PhD.**, Sharif University of Technology & IPM School of Computer Science, Tehran, Iran. Email: azad@ipm.ir

- **Ahmad Khonsari, PhD.** University of Tehran & IPM School of Computer Science, Tehran, Iran. Email: ak@ipm.ir
- **Shahram Rahimi, PhD.** Department of Computer Science, Southern Illinois University, IL, USA Email: rahimi@cs.siu.edu
- **Jafar Habibi PhD.,** Sharif University of Technology, Tehran, Iran. Email: jhabibi@Sharif.edu
- **Hassan Abbolhasani PhD.,** Sharif University of Technology, Tehran, Iran. Email: abolhassani@sharif.edu
- **Hamid Beigy PhD.,** Sharif University of Technology, Tehran, Iran. Email beigy@ce.sharif.edu